

638861

REPORT NUMBER: 214-CAL-07-08

**SAFETY COMPLIANCE TESTING FOR FMVSS 214
SIDE IMPACT PROTECTION**

GENERAL MOTORS CORPORATION
2007 BUICK LACROSSE
4-DOOR SEDAN

NHTSA NUMBER: C70105

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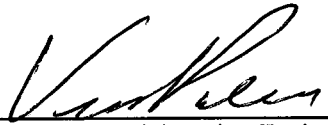
April 6, 2007

FINAL REPORT

U. S. DEPARTMENT OF TRANSPORTATION
National Highway Traffic Safety Administration
Enforcement
Office of Vehicle Safety Compliance
400 Seventh Street, SW
Room 6111 (NVS-220)
Washington, DC 20590

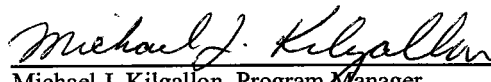
This Final Test Report was prepared for the U.S. Department of Transportation, National Highway Traffic Safety Administration, under Contract No. DTNH22-02-D-01114. This publication is distributed by the U.S. Department of Transportation, National Highway Traffic Safety Administration, in the interest of information exchange. The opinions, findings and conclusions expressed in this publication are those of the author(s) and not necessarily those of the Department of Transportation or the National Highway Traffic Safety Administration. The United States Government assumes no liability for its contents or use thereof. If trade or manufactures' names or products are mentioned, it is only because they are considered essential to the object of the publication and should not be construed as an endorsement. The United States Government does not endorse products or manufacturers.

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16. Abstract A 48/24 kph 90° Impact Moving Deformable Barrier Side Impact Test was conducted on the subject 2007 Buick LaCrosse 4-Door Sedan in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP-214D-06 (July 26, 2001) to determine FMVSS 214 Side Impact Protection compliance. This test was conducted at the Calspan Transportation Sciences Crash Test Facility in Buffalo, New York, on April 6, 2007. The impact velocity of the Moving Deformable Barrier (MDB) was 52.6 kph, and the ambient temperature at the struck (driver's) side of the target vehicle at the time of impact was 21°C. The target vehicle post-test maximum crush was 272 mm at level 2. The test vehicle's performance follows: <table border="0"> <thead> <tr> <th></th> <th align="center"><u>Front SID</u></th> <th></th> <th align="center"><u>Rear SID</u></th> </tr> </thead> <tbody> <tr> <td>Left Upper Rib Acceleration (LUR):</td> <td align="center">51.43</td> <td>g's</td> <td align="center">50.45</td> </tr> <tr> <td>Left Lower Rib Acceleration (LLR):</td> <td align="center">52.95</td> <td>g's</td> <td align="center">47.68</td> </tr> <tr> <td>Lower Spine Acceleration (T₁₂):</td> <td align="center">56.38</td> <td>g's</td> <td align="center">50.10</td> </tr> <tr> <td>Thoracic Trauma Index (TTI):</td> <td align="center">55</td> <td>g's</td> <td align="center">50</td> </tr> <tr> <td>Pelvis Acceleration (PEV):</td> <td align="center">63</td> <td>g's</td> <td align="center">45</td> </tr> </tbody> </table> The two doors on the struck side of the vehicle did not separate from the body at the hinges or latches and the opposite doors did not open during the side impact event. The left side curtain airbag did not deploy during impact.					<u>Front SID</u>		<u>Rear SID</u>	Left Upper Rib Acceleration (LUR):	51.43	g's	50.45	Left Lower Rib Acceleration (LLR):	52.95	g's	47.68	Lower Spine Acceleration (T ₁₂):	56.38	g's	50.10	Thoracic Trauma Index (TTI):	55	g's	50	Pelvis Acceleration (PEV):	63	g's	45
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SECTION 1

PURPOSE AND TEST PROCEDURE

This side impact test is part of the FMVSS 214 Side Impact Protection Compliance Test Program sponsored by the National Highway Traffic Safety Administration (NHTSA) under Contract No. DTNH22-02-D-01114. The purpose of this test was to evaluate side impact protection in a 2007 Buick LaCrosse 4-Door Sedan. The test was conducted in accordance with the Office of Vehicle Safety Compliance's Laboratory Test Procedure (TP-214D-06, dated July 26, 2001).

SECTION 2

SUMMARY OF SIDE IMPACT TEST

A 2007 Buick LaCrosse 4-Door Sedan was impacted on the left or driver's side by a Moving Deformable Barrier (MDB) which was moving forward in a 27° crabbed position to the monorail at a velocity of 52.6 kph (32.7 mph). The target vehicle was stationary and was positioned at an angle of 63° to the line of forward motion. The side impact test was conducted by the Calspan Transportation Sciences Center in Buffalo, New York on April 6, 2007. Pre- and post-test photographs of the test vehicle, the moving deformable barrier (MDB), and the side impact dummies (SIDs) are included in Appendix A.

Two restrained Side Impact Dummies (SIDs) were placed in the driver (Pos. #1) and left rear (Pos. #4) designated seating positions according to the instructions specified in the OVSC Side Impact Laboratory Test Procedure (TP-214D-06, dated July 26, 2001). Both SIDs were certified prior to this test. The side impact test was documented by one real-time camera and 9 high-speed cameras. Camera locations and other pertinent camera information are included in this report.

The SIDs were instrumented with the following accelerometers:

1. Left Upper Rib (LUR) uniaxial and redundant accelerometer (Y-direction)
2. Left Lower Rib (LLR) uniaxial and redundant accelerometer (Y-direction)
3. Lower Thoracic Spine (T₁₂) uniaxial and redundant accelerometer (Y-direction)
4. Pelvic (PEV) section uniaxial and redundant accelerometer (Y-direction)
5. Head triaxial accelerometers (X-, Y- and Z-direction)

A summary of the side impact dummy (SID) configuration and verification test data can be found in Appendix C. A total of 48 channels of data were recorded. Appendix B contains the vehicle, MDB and dummy response data traces.

The following table summarizes the results of the test.

Injury Criteria	Front SID	Rear SID
TTI (g)	55	50
PEV (g)	63	45

FMVSS 214D requires that the TTI not exceed 85 g's for 4 door vehicles and not exceed 90 g's for 2 door vehicles. Peak lateral pelvis acceleration shall not exceed 130 g's.

SECTION 3

SUMMARY OF TEST RESULTS

DATA SHEET 1**GENERAL TEST AND VEHICLE PARAMETER DATA****TEST VEHICLE INFORMATION:**

Year/Make/Model/Body Style: 2007 Buick LaCrosse 4-Door Sedan

Vehicle Body Color: Blue Metallic VIN: 2G4WC582371190990

Vehicle NHTSA No.: C70105 Month & Year of Manufacture: _____

Engine Data: 6 Cylinders; - CID; 3.8 Liters; - cc

Engine Placement: - Longitudinal; or X Lateral

Transmission: 4 Speed; - Manual; X Automatic; - Overdrive

Final Drive: - Rear Wheel Drive; X Front Wheel Drive; - Four Wheel Drive

Odometer Reading 138 km

Supplemental Airbag Restraints:

Front Occupant: X Frontal; - Knee; - Side; X Curtain

Rear Occupant: X Frontal; - Knee; - Side; X Curtain

Options:

X ADL; X A/C; X Power Steering; X Power Brakes; X Power Windows

DATA FROM TIRE PLACARD

Recommended Tire Size: P225/60R16

*Recommended Cold Tire Pressure: 210 kPa FRONT; 210 kPa REAR

DATA FROM TIRE SIDEWALL:

Size of Tires on Test Vehicle: P225/60R16; Manufacturer: Goodyear

Tire Pressure with Maximum Capacity Vehicle Load: Front: 210 kPa; Rear: 210 kPa

Treadwear: 460; Traction: A; Temperature: B

VEHICLE CAPACITY DATA:

Number of Occupants: 3 Front; 3 Rear; - 3rd Seat; 6 Total

Type of Front Seats: X Bucket; - Bench; - Split Bench;

Type of Rear Seats: - Bucket; X Bench; - Split Bench; - Contoured

Type of Front Seat Back: - Fixed; X Adjustable with X Lever or - Knob

Type of Rear Seat Back: X Fixed; - Adjustable with - Lever or - Knob

Vehicle Max Capacity Loading = 484.0 kg (A)

No. of Occupants x 68.04 kg. = 408.24 kg (B)

Vehicle Cargo Capacity = 75.76 kg (A-B)

TEST VEHICLE DELIVERED WEIGHT WITH MAXIMUM FLUIDS:

Left Front = 492.0 kg Left Rear = 303.5 kg

Right Front = 519.0 kg Right Rear = 290.5 kg

TOTAL FRONT = 1011.0 kg TOTAL REAR = 594.0 kg

% of Total Weight = 62.99 % % of Total Weight = 37.0 %

TOTAL WEIGHT = 1605.0 kg

* Tire pressure used in test.

DATA SHEET 1 (continued)**GENERAL TEST VEHICLE PARAMETER DATA**Vehicle: 2007 Buick LaCrosse 4-Door SedanNHTSA No. C70105**CALCULATION OF VEHICLE'S TARGET TEST WEIGHT:**

Total Test Vehicle Delivered Weight with Max. Fluids	=	<u>1605.0</u>	kg (A)
Maximum Cargo Carrying Capacity of Test Vehicle	=	<u>75.76</u>	kg (B)
Weight of instrumented Side Impact Dummies (2 X 81.2 kg)	=	<u>162.4</u>	kg (C)
TEST VEHICLE TARGET WEIGHT:	=	<u>1843.16</u>	kg (A+B+C)

FULLY LOADED TEST VEHICLE (UDVW + 1 or 2 SID(s) + CARGO):

Left Front	=	<u>551.5</u>	kg	Left Rear	=	<u>409.5</u>	kg
Right Front	=	<u>525.5</u>	kg	Right Rear	=	<u>365.0</u>	kg
TOTAL FRONT	=	<u>1077.0</u>	kg	TOTAL REAR	=	<u>774.5</u>	kg
% of Total Weight	=	<u>58.2</u>	%	% of Total Weight	=	<u>41.8</u>	%
TOTAL TEST WEIGHT =		<u>1851.5</u>	kg				

AS TESTED WEIGHT OF TEST VEHICLE (1 OR 2 SID(s) + CARGO + EQUIPMENT & INSTRUMENTATION):

Left Front	=	<u>540.0</u>	kg	Left Rear	=	<u>401.0</u>	kg
Right Front	=	<u>523.5</u>	kg	Right Rear	=	<u>370.0</u>	kg
TOTAL FRONT	=	<u>1063.5</u>	kg	TOTAL REAR	=	<u>771.0</u>	kg
% of Total Weight	=	<u>58.0</u>	%	% of Total Weight	=	<u>42.0</u>	%
TOTAL TEST WEIGHT =		<u>1834.5</u>	kg				

TEST VEHICLE ATTITUDE (all dimensions in millimeters):**AS DELIVERED:**

Left Front	<u>756</u>	Right Front	<u>754</u>	Left Rear	<u>756</u>	Right Rear	<u>745</u>
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FULLY LOADED:

Left Front	<u>735</u>	Right Front	<u>709</u>	Left Rear	<u>709</u>	Right Rear	<u>714</u>
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READY FOR TEST:

Left Front	<u>743</u>	Right Front	<u>747</u>	Left Rear	<u>710</u>	Right Rear	<u>714</u>
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Test Vehicle Wheelbase: 2812 millimetersC.G. = 1182 millimeters rearward of front wheel centerline**TOTAL VEHICLE LENGTH:**

Right Side =	<u>4961</u>	millimeters
Left Side =	<u>5035</u>	millimeters
Centerline =	<u>4960</u>	millimeters

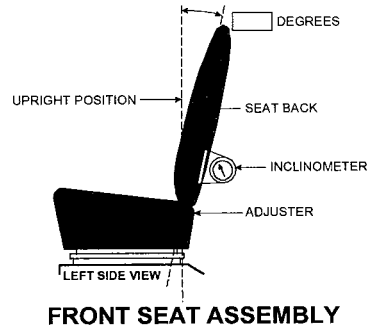
DATA SHEET 1 (continued)

GENERAL TEST VEHICLE PARAMETER DATA

Vehicle: 2007 Buick LaCrosse 4-Door Sedan

NHTSA No. C70105

Nominal Design Riding Position for adjustable driver and passenger seat backs. Please describe how to position the inclinometer to measure the seat back angle. Include description of the location of the adjustment latch detent, if applicable.



FRONT SEAT CUSHION PLACEMENT: Seat was placed in mid-position of full seat travel = 148 mm

Total Length of Adjustment Travel: 296 Millimeters

Total Number of Adjustment Positions or Detents: Left front seat is a power seat

FRONT SEAT BACK ADJUSTMENT POSITION: Seat back placed at 14.3 degrees measured from the head rest post

Seat Back Torso Angle: 14.3 degrees

SECOND POSITION SEAT:

Total Length of Fore/Aft Adjustment Travel: N/A millimeters

Seat Back Adjustment Position: N/A

ADJUSTABLE STEERING COLUMN POSITION: Steering column placed in 5th detent from upper most locking position (Angle = 20.6 deg)

WINDOW POSITIONS: Left Front: Closed Left Rear: Closed

Right Front: open Right Rear: open

Note: Windows will be in closed position on struck side of test vehicle and in open position on opposite side.

AUTOMATIC DOOR LOCKS: Is test vehicle equipped with ADLs? X Yes No

Does vehicle owner's manual describe how to deactivate ADLs? X Yes No N/A

Comments: None

AMOUNT OF STODDARD SOLVENT IN FUEL TANK:

64.0 liters (Fuel Tank Usable Capacity)

59.1 liters used for test (92%-94% of Fuel Tank Usable Capacity)

LOCATION OF IMPACT POINT ON TEST VEHICLE SIDE TO BE IMPACTED:

Wheelbase = 2812 millimeters

Impact Point is 466 millimeters rearward of front axle centerline
(which is 940 millimeters forward of the wheelbase midpoint)

Actual Impact Point is 471 millimeters rearward of front axle centerline

DATA SHEET 2

TEST VEHICLE SUMMARY OF RESULTS

VEHICLE IDENTIFICATION:

Vehicle Year/Make/Model: 2007 Buick LaCrosse

Body Style: 4-Door Sedan

VIN: 2G4WC582371190990

NHTSA No.: C70105

Test Date: April 6, 2007

Overall Length = 5035 millimeters; Overall Width = 1844 millimeters

VEHICLE TEST WEIGHT (Pre-Test):

Left Front = 540.0 kg Left Rear = 401.0 kg

Right Front = 523.5 kg Right Rear = 370.0 kg

TOTAL FRONT = 1063.5 kg TOTAL REAR = 771.0 kg

TOTAL VEHICLE WEIGHT 1834.5 kg

Wheelbase = 2812 millimeters

Longitudinal C.G. from Center of Front Axle = 1181.82 millimeters

Impact Angle with Respect to Impactor = 90 degrees

ACTUAL IMPACT POINT

Actual Impact Point is 5 mm rearward of nominal impact ref. line (Lateral)

Actual Impact Point is 6 mm below nominal impact point (Vertical)

MAXIMUM EXTERIOR STATIC CRUSH:

1. LEVEL 1 (224 mm above ground) = 112 millimeters

2. LEVEL 2 (478 mm above ground) = 252 millimeters

3. LEVEL 3 (627 mm above ground) = 213 millimeters

4. LEVEL 4 (865 mm above ground) = 171 millimeters

5. LEVEL 5 (1372 mm above ground) = 72 millimeters

Maximum Post-Test Intrusion = 0 millimeters

OCCUPANTS:

Front Passenger:

Rear Passenger:

Dummy Identification 015

013

Restraints Used 3-point belt*

3-point belt*

* Side curtain airbag did not deploy during test

INSTRUMENTATION:

Number of Vehicle Data Channels: = 21

Number of Cameras: Onboard = 3

Offboard = 7

TOTAL = 10

DATA SHEET 3

MOVING DEFORMABLE BARRIER (MDB) SUMMARY

Vehicle: 2007 Buick LaCrosse 4-Door Sedan

NHTSA No. C70105

MDB FACE MANUFACTURER AND SERIAL NUMBER:

POSITION OF IMPACT (MDB) ON MONORAIL:

Crabbed 27° to left

MDB DETAILS:

Overall Width of Framework Carriage	=	<u>1250</u>	millimeters
Overall Length of MDB (incl. honeycomb impact face)	=	<u>4120</u>	millimeters
Wheelbase of Framework Carriage	=	<u>2590</u>	millimeters
Tread of Framework Carriage (Front & Rear)	=	<u>1875</u>	millimeters
C.G. Location Rearward of Front Axle	=	<u>1104</u>	millimeters

MDB WEIGHT:

Left Front	=	<u>409.5</u>	kg	Left Rear	=	<u>281.5</u>	kg
Right Front	=	<u>372.5</u>	kg	Right Rear	=	<u>299.0</u>	kg
TOTAL FRONT	=	<u>782.0</u>	kg	TOTAL REAR	=	<u>580.5</u>	kg
TOTAL MDB WEIGHT	=	<u>1362.5</u>	kg				
Impact Angle (MDB C/L to Target Vehicle C/L)	=	<u>90</u>	degrees				
Impact Speed	=	<u>52.6</u>	kph				

MAXIMUM STATIC CRUSH OF HONEYCOMB IMPACT FACE:

1. Row A at Center of Bumper Level	=	<u>108</u>	millimeters
2. Row B at Top of Bumper Level	=	<u>71</u>	millimeters
3. Row C at Mid Level	=	<u>72</u>	millimeters
4. Row D at Top of Stack Level	=	<u>78</u>	millimeters

INSTRUMENTATION:

Number of MDB Data Channels	=	<u>5</u>
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DATA SHEET 4

POST-TEST OBSERVATIONS

Vehicle: 2007 Buick LaCrosse 4-Door Sedan

NHTSA No. C70105

VISIBLE DUMMY CONTACT POINTS:

	<u>LEFT FRONT SID</u>	<u>LEFT REAR SID</u>
Head:	Side of head with left front window	C-pillar and side head riser
Upper Torso:	Door trim	Door trim
Lower Torso:	Arm rest	Arm rest
Left Knee:	Door trim	Arm rest
Right Knee:	Left knee	Left knee

DOOR OPENING:

	<u>LEFT DOOR</u>	<u>RIGHT DOOR</u>
Front:	Closed, latched, and inoperable without tools	Closed, latched, and operable without tools
Rear:	Closed, latched, and inoperable without tools	Closed, latched, and operable without tools

MDB DISTANCE FROM TARGET IMPACT POINT:

Vertical:	6 mm below target
Horizontal:	5 mm rearward target

ARM REST LOCATIONS:

Front:	260 mm below bottom of window sill
Rear:	310 mm below bottom of window sill

SEAT MOVEMENT:

Front:	None
Rear:	

GLAZING DAMAGE:

Windshield:	Cracks on most of windshield but more prevalent on impacted side.
Window:	The left rear window shattered during impact. The left front window was impacted by dummy head but remained in vehicle.

PILLAR PERFORMANCE:

No visible tears or separations	
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SILL SEPARATION:

None	
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AIR BAG DEPLOYMENT STATUS:

	DRIVER	FRONT PASSENGER	REAR PASSENGER
FRONT	None	None	N/A
SIDE	None*	None	None*

OTHER NOTABLE IMPACT EFFECTS:

* The left side curtain airbag did not deploy during test.	
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SECTION 4

OCCUPANT AND VEHICLE INFORMATION

DATA SHEET 5

SID INSTRUMENTATION DATA

Vehicle: 2007 Buick LaCrosse 4-Door Sedan

NHTSA No. C70105

	Front Dummy ID# 015				Rear Dummy ID# 013				
	Pos. Direction		Neg. Direction		Pos. Direction		Neg. Direction		
	Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)	
HEAD ACCELERATIONS:									
Longitudinal X	24.1	54.8	-10.4	104.0	10.6	58.1	-38.4	50.4	
Lateral Y	82.1	54.2	-5.2	167.1	106.0	50.0	-5.3	42.7	
Vertical Z	2.6	103.2	-29.5	54.0	55.7	50.5	-39.1	56.3	
Resultant R	86.4	54.1	0	-12.6	125.1	50.3	0	-19.3	
HIC	79.3				482.6				
RIB ACCELERATIONS:									
Upper Rib Lateral Y	51.4	35.0	-6.9	99.3	50.5	45.6	-6.8	110.0	
Upper Rib Lateral Y(R)	51.4	34.4	-7.3	98.7	49.0	45.6	-8.0	71.2	
Lower Rib Lateral Y	52.9	34.4	-8.5	98.1	47.7	46.2	-12.8	70.6	
Lower Rib Lateral Y(R)	53.3	34.4	-8.8	98.1	47.0	46.9	-13.6	70.6	
SPINE ACCELERATIONS:									
Lower Lateral Y	56.4	36.2	-13.5	70.6	50.1	51.8	-8.9	74.3	
Lower Lateral Y(R)	55.7	36.2	-13.7	70.6	48.9	51.8	-8.9	73.7	
PELVIC ACCELERATIONS:									
Lateral Y	63.3	33.7	-9.3	60.0	45.3	39.4	-5.0	99.3	
Lateral Y(R)	63.4	33.7	-9.4	60.0	45.2	39.4	-4.9	98.7	

REFERENCE: Positive Direction –
 Longitudinal (X) = forward
 Lateral (Y) = to right
 Vertical (Z) = down

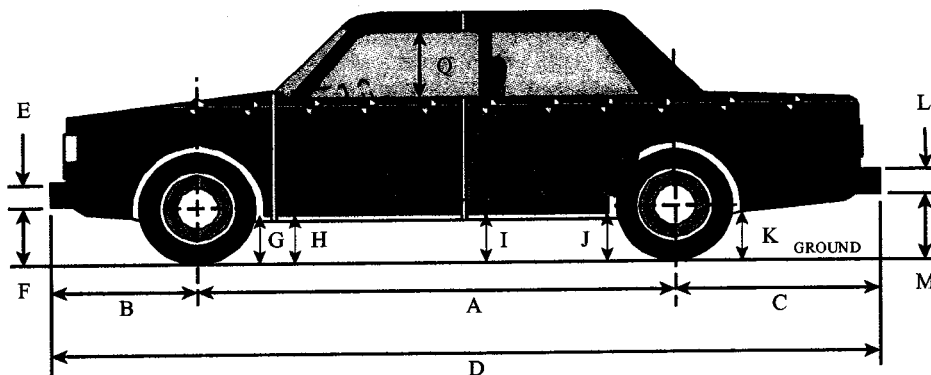
Note: Above data has been FIR filtered, Y(R) denotes redundant Y direction accelerometer.
 Head Accelerations are filtered at SAE Class 1000.

DATA SHEET 6

VEHICLE SIDE MEASUREMENTS

Vehicle: 2007 Buick LaCrosse 4-Door Sedan

NHTSA No. C70105



LEFT SIDE VIEW

NOTE: all dimensions are in millimeters with tolerance of ± 3 mm

	PRE-TEST (as delivered)	PRE-TEST (as tested)	POST-TEST (as tested)	Δ CHANGE
A	2812	2812	2784	-28
B	1117	1117	1128	11
C	1105	1105	1114	9
D	5035	-	5027	-8
E	110	-	113	3
F	402	404	428	24
G	214	191	191	0
H	213	188	178	-10
I	215	178	178	0
J1	210	170	167	-3
J2	213	172	176	4
K	291	240	246	6
L	319	-	320	1
M	334	284	282	-2
N	693	-	659	-34
O	819	-	785	-34
P	1204	-	1136	-68
Q	460	-	465	5
R	4914	-	4912	-2
S	4910	-	4881	-29
T	1844	-	1662	-182

D = Length at Centerline

E&L = Bumper Thickness

R = Right Side Length

S = Left Side Length

T = Width at B-Pillar

J1 = To Pinch Weld

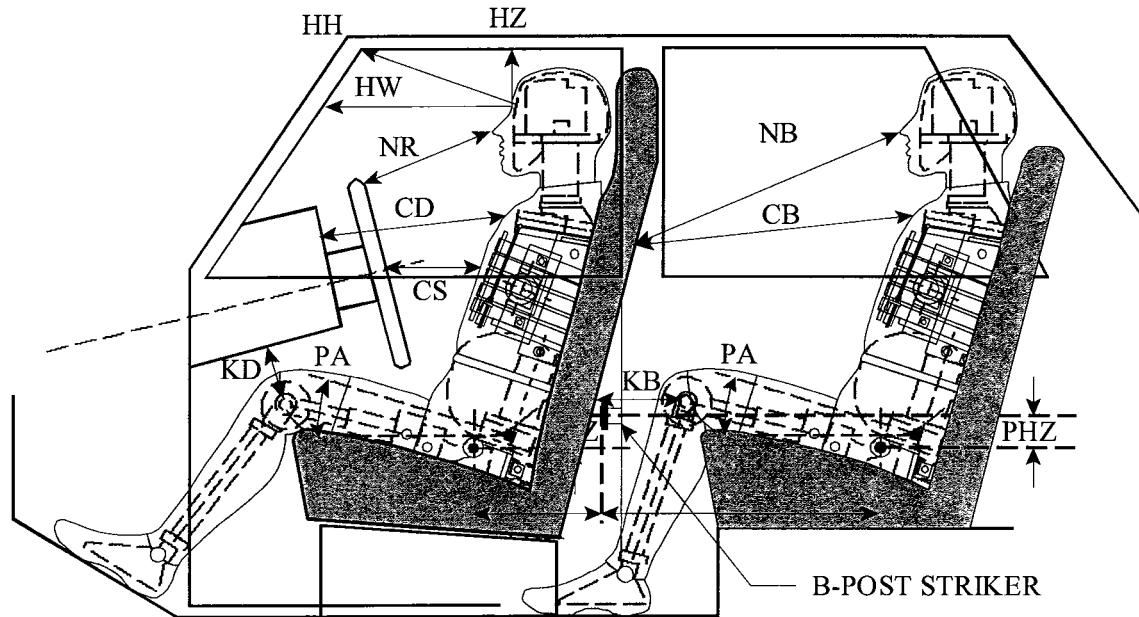
J2 = To Sill

DATA SHEET 7

SID LONGITUDINAL CLEARANCE DIMENSIONS

Vehicle: 2007 Buick LaCrosse 4-Door Sedan

NHTSA No. C70105



LEFT SIDE VIEW

NOTE: 2-DOOR VEHICLE SHOWN.
REAR DUMMY PHX & PHZ
MEASUREMENTS FOR A 4-DOOR
VEHICLE WOULD USE THE C-POST
STRIKER AS A REFERENCE POINT

NOTE: All dimensions are in millimeters with tolerance of ± 3 mm

	DRIVER ID# 015	LEFT REAR PASS. ID# 013
HH	364	N/A
HW	589	N/A
HZ	165	130
NR/NB	405	663
CD/CB	504	557
CS	334	N/A
KDL(KDA°)/KBL(KDA°)	182 / (37 °)	225 / (25 °)
KDR(KBA°)/KBR(KBA°)	174 / (30 °)	210 / (25 °)
PA°	23.2 °	25.0 °
PHX	195	264
PHZ	112	275

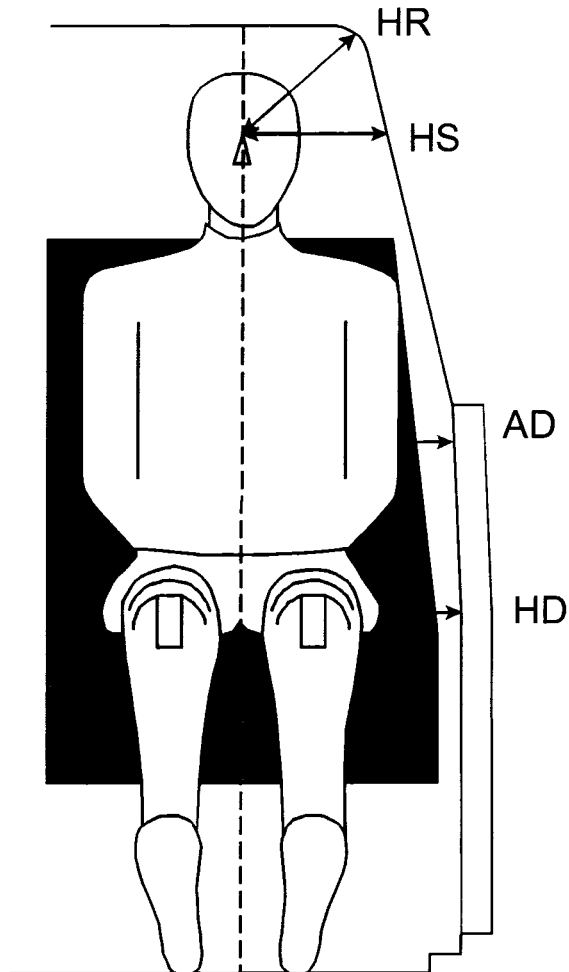
Note: 2-door vehicle shown. Rear dummy PHX & PHZ measurements for 4-door vehicle would use the C-post striker as a reference point.

DATA SHEET 8

SID LATERAL CLEARANCE DIMENSIONS

Vehicle: 2007 Buick LaCrosse 4-Door Sedan

NHTSA No. C70105



NOTE: All dimensions are in millimeters with tolerance of ± 3 mm

	DRIVER ID # 015		LEFT REAR PASS. ID # 013	
HR	170		147	
HS	319		310	
AD*	LOWER: 114	UPPER: 105	LOWER: 121	UPPER: 109
HD	147		168	

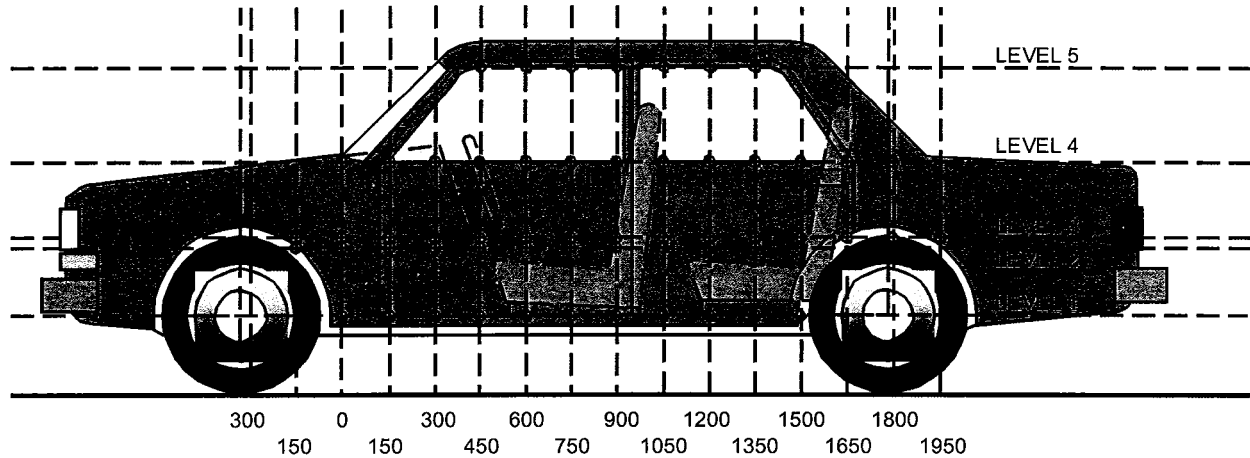
* Lower measurement is taken laterally at the center of the lower rib accelerometer height from the SID arm to the closest part of the vehicle side. Upper measurement is taken laterally at the center of the upper rib accelerometer height from the SID arm to the closest part of the vehicle side.

DATA SHEET 9

VEHICLE SIDE MEASUREMENTS

Vehicle: 2007 Buick LaCrosse 4-Door Sedan

NHTSA No. C70105



LEFT SIDE VIEW

NOTE: All measurements are in millimeters (mm)

LEVEL 5 - WINDOW TOP
LEVEL 4 - WINDOW SILL
LEVEL 3 - MID-DOOR
LEVEL 2 - OCCUPANT H-POINT
LEVEL 1 - SILL TOP HEIGHT

MEASUREMENTS ARE TAKEN WHEN THE VEHICLE IS IN THE "AS TESTED" CONFIGURATION.

Measurements Along the Vertical 750 mm Line Shown Above:

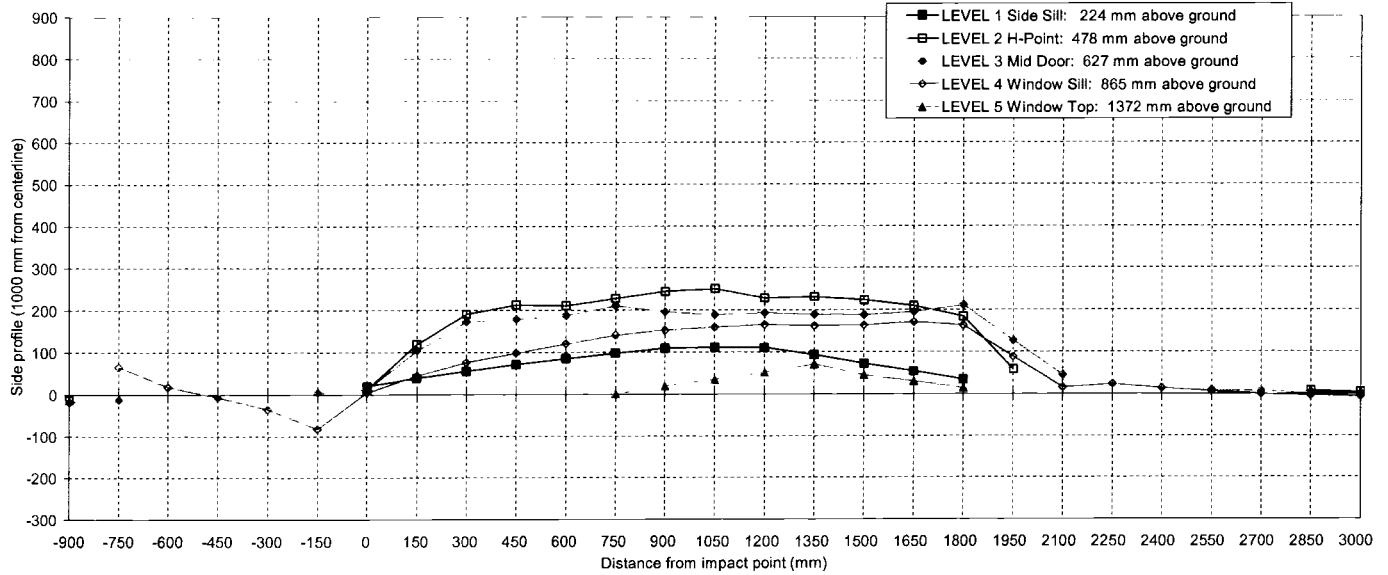
Level 5 @ Window Top	=	<u>72</u>	millimeters
Level 4 @ Window Sill	=	<u>171</u>	millimeters
Level 3 @ Mid Door	=	<u>213</u>	millimeters
Level 2 @ Occupant H-Point	=	<u>272</u>	millimeters
Level 1 @ Sill Top Height	=	<u>112</u>	millimeters

DATA SHEET 10

VEHICLE EXTERIOR CRUSH PROFILES - ALL LEVELS

Vehicle: 2007 Buick LaCrosse 4-Door Sedan

NHTSA No. C70105



NOTE: All dimensions are in millimeters with a tolerance of ± 3 mm

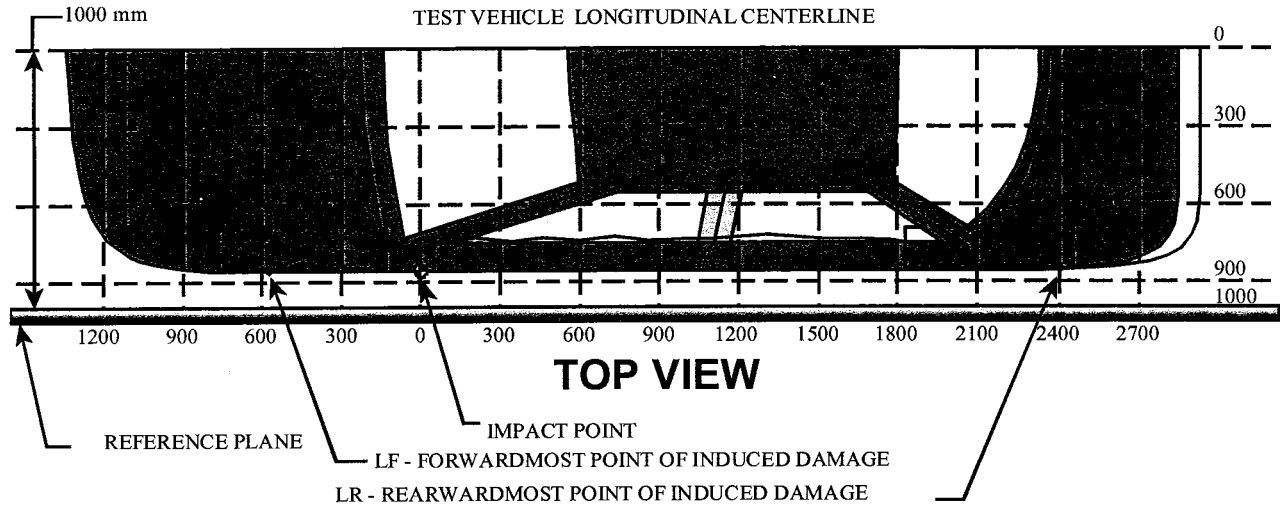
		DISTANCE IN MILLIMETERS (mm) FROM IMPACT POINT																												
LEVEL	HEIGHT (mm)		-900	-750	-600	-450	-300	-150	0	150	300	450	600	750	900	1050	1200	1350	1500	1650	1800	1950	2100	2250	2400	2550	2700	2850	3000	
LEVEL 1 SIDE SILL	224	PRE	--	--	--	--	--	--	146	148	149	149	149	149	148	147	146	145	144	141	139	--	--	--	--	--	--	--	--	--
		POST	--	--	--	--	--	--	166	187	205	221	235	248	258	259	257	239	217	195	174	--	--	--	--	--	--	--	--	--
		CRUSH	N/A	N/A	N/A	N/A	N/A	N/A	20	39	56	72	86	99	110	112	111	94	73	54	35	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LEVEL 2 H POINT	478	PRE	112	--	--	--	--	--	99	100	100	99	98	97	97	96	97	97	97	96	94	92	--	--	--	--	--	--	130	157
		POST	99	--	--	--	--	--	112	220	292	313	310	326	342	348	326	329	321	306	279	151	--	--	--	--	--	--	138	162
		CRUSH	-13	N/A	N/A	N/A	N/A	N/A	13	120	192	214	212	229	245	252	229	232	224	210	185	59	N/A	N/A	N/A	N/A	N/A	N/A	8	5
LEVEL 3 MID DOOR	627	PRE	119	95	--	--	--	84	89	92	93	93	92	92	92	92	93	93	92	91	88	86	83	--	--	90	107	134	164	
		POST	102	83	--	--	--	90	101	197	267	273	281	304	289	283	288	284	281	287	301	214	129	--	--	100	115	139	166	
		CRUSH	-17	-12	N/A	N/A	N/A	6	12	105	174	180	189	212	197	191	195	191	189	196	213	128	46	N/A	N/A	10	8	5	2	
LEVEL 4 WINDOW SILL	865	PRE	--	133	138	149	169	215	129	130	129	127	126	125	125	124	125	125	126	127	125	121	118	119	125	136	155	177	207	
		POST	--	198	156	142	134	133	134	175	205	226	247	266	277	283	290	287	290	298	288	210	134	143	139	143	155	174	201	
		CRUSH	N/A	65	18	-7	-35	-82	5	45	76	99	121	141	152	159	165	162	164	171	163	89	16	24	14	7	0	-3	-6	
LEVEL 5 WINDOW TOP	1372	PRE	--	--	--	--	--	--	--	--	--	--	--	506	417	409	407	411	418	427	451	--	--	--	--	--	--	--	--	
		POST	--	--	--	--	--	--	--	--	--	--	--	--	508	438	445	460	483	464	458	466	--	--	--	--	--	--	--	--
		CRUSH	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2	21	36	53	72	46	31	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

DATA SHEET 11

VEHICLE DAMAGE PROFILE DISTANCES

Vehicle: 2007 Buick LaCrosse 4-Door Sedan

NHTSA No. C70105



MEASUREMENT CONVENTIONS:

Forward of the impact point (towards front of vehicle) is considered negative (—).
Rearward of the impact point (toward rearend of vehicle) is considered positive (+).

NOTE: All dimensions are in millimeters with tolerance of ± 3 mm.

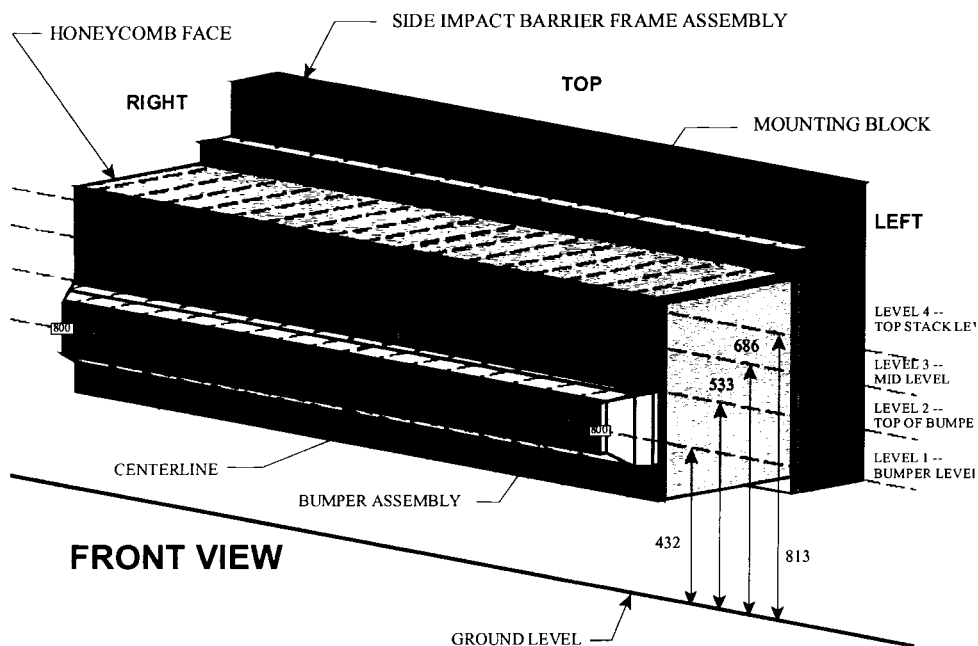
DPD MEASUREMENTS (mm)		LEVEL (mm)	POST TEST (mm)	PRETEST (mm)	STATIC CRUSH (mm)
1 (LR)	2400	865	139	125	14
2	1890	627	249	87	162
3	1380	478	327	97	230
4	870	478	339	97	242
5	360	478	300	100	200
6 (LF)	-150	627	90	84	6

DATA SHEET 12

EXTERIOR STATIC CRUSH FOR IMPACTOR FACE

Vehicle: 2007 Buick LaCrosse 4-Door Sedan

NHTSA No. C70105



NOTE: Dimensions are shown in millimeters, mm

NOTE: All dimensions are in millimeters with a tolerance of ± 3 mm

LEVEL	HEIGHT AT CL (mm)*		DISTANCE RIGHT OF CENTER (mm)									DISTANCE LEFT OF CENTER (mm)							
			800	700	600	500	400	300	200	100	0	100	200	300	400	500	600	700	800
LEVEL 4 TOP STACK	813	PRE	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619
		POST	623	607	606	605	605	609	619	624	618	614	615	617	624	640	646	660	697
		CRUSH	4	-12	-13	-14	-14	-10	0	5	-1	-5	-4	-2	5	21	27	41	78
LEVEL 3 MID LEVEL	686	PRE	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619
		POST	623	610	611	614	615	613	614	619	615	617	619	620	623	625	629	634	691
		CRUSH	4	-9	-8	-5	-4	-6	-5	0	-4	-2	0	1	4	6	10	15	72
LEVEL 2 TOP BUMPER	533	PRE	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619
		POST	690	682	674	664	654	646	638	634	637	637	640	641	643	643	647	663	678
		CRUSH	71	63	55	45	35	27	19	15	18	18	21	22	24	24	28	44	59
LEVEL 1 MID BUMPER	432	PRE	535	519	518	518	518	518	518	518	518	518	518	518	518	518	518	519	535
		POST	643	623	598	580	570	580	574	562	564	564	563	559	560	560	566	573	619
		CRUSH	108	104	80	62	52	62	56	44	46	46	45	41	42	42	48	54	84

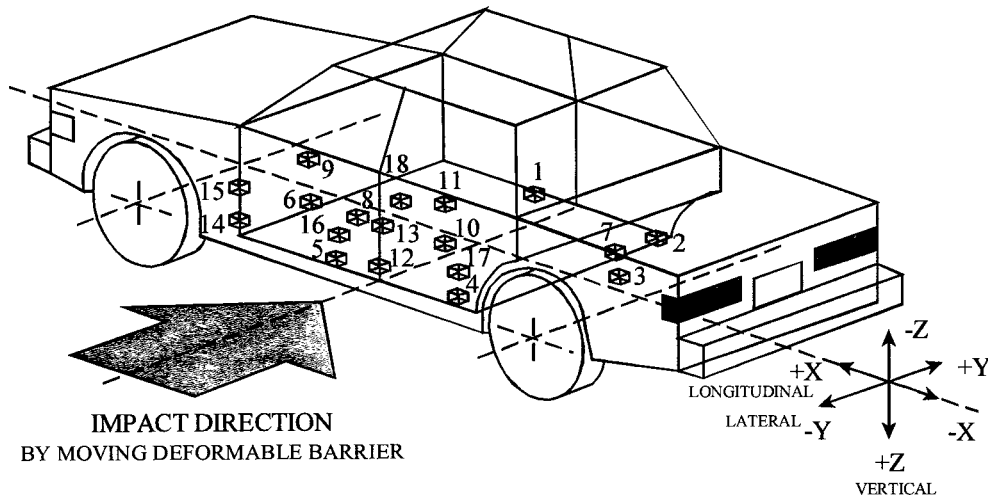
*Heights measured above ground level.

DATA SHEET 13

TEST VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Vehicle: 2007 Buick LaCrosse 4-Door Sedan

NHTSA No. C70105



- 1-Right Side Sill @ Front Seat
- 2-Right Side Sill @ Rear Seat
- 3-Rear Floorpan Above Axle
- 4-Left Side Sill @ Rear Seat
- 5-Left Side Sill @ Front Seat
- 6-Left Front Door on Centerline
- 7-Right Rear Occupant Compartment
- 8-Midrear of Left Front Door
- 9-Left Front Door Upper Centerline

- 10-Midrear of Left Rear Door
- 11-Left Rear Door Upper Centerline
- 12-Left Lower B-Pillar
- 13-Left Middle B-Pillar
- 14-Left Lower A-Pillar
- 15-Left Middle A-Pillar
- 16-Front Seat Track
- 17-Rear Seat Track
- 18-Vehicle CG

DATA SHEET 13 (continued)

VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Vehicle: 2007 Buick LaCrosse 4-Door Sedan

NHTSA No. C70105

Accel. No.	Location	Coordinates (mm)±3 mm				Long. (x)		Lat. (y)		Vert. (z)		Resultant	
						Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)
		X*	Y*	Z*									
1	Right Side Sill at Front Seat	3070	705	-277	pos.	4.4	56.7	26.6	8.7	2.6	62.9	28.3	8.8
					neg.	-3.7	37.5	-4.1	43.1	-10.8	10.3		
2	Right Side Sill at Rear Seat	2289	706	-268	pos.	4.8	56.5	25.1	8.5	4.5	47.1	25.8	8.6
					neg.	-3.9	37.6	-2.9	127.6	-8.4	18.3		
3	Rear Floorpan Above Axle	1397	0	-484	pos.	4.0	11.5	19.7	40.4	6.3	22.8	21.3	40.6
					neg.	-8.4	42.1	-2.1	106.8	-6.3	12.7		
4	Left Side Sill at Rear Seat	2322	-699	-243	pos.	-	-	61.6	5.1	-	-	-	-
					neg.	-	-	-11.3	34.7	-	-	-	-
5	Left Side Sill at Front Seat	3007	-703	-293	pos.	-	-	106.4	4.4	-	-	-	-
					neg.	-	-	-11.8	15.5	-	-	-	-
6**	Left Front Door on Centerline				pos.	-	-	-	-	-	-	-	-
					neg.	-	-	-	-	-	-	-	-
7	Right Rear Occupant Compartment	2248	401	-205	pos.	-	-	24.9	7.6	-	-	-	-
					neg.	-	-	-2.2	80.4	-	-	-	-
8**	Midrear of Left Front Door				pos.	-	-	-	-	-	-	-	-
					neg.	-	-	-	-	-	-	-	-
9**	Left Front Door Upper Centerline				pos.	-	-	-	-	-	-	-	-
					neg.	-	-	-	-	-	-	-	-
10**	Midrear of Left Rear Door				Pos.	-	-	-	-	-	-	-	-
					neg.	-	-	-	-	-	-	-	-
11**	Left Rear Door Upper Centerline				pos.	-	-	-	-	-	-	-	-
					neg.	-	-	-	-	-	-	-	-

*Reference: X - Rear Bumper (+ Forward)

Y - Vehicle Centerline (+ To Right)

Z - Ground Level (+ Down)

**Accelerometer was not requested by COTR.

4-11

8675-

DATA SHEET 13 (continued)

VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Vehicle: 2007 Buick LaCrosse 4-Door Sedan

NHTSA No. C70105

4-12

Accel. No.	Location	Coordinates (mm)±3 mm				Long. (x)		Lat. (y)		Vert. (z)		Resultant	
						Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)
		X*	Y*	Z*									
12	Left Lower B-Pillar	2379	-691	-395	pos. neg.	- -	- -	275.9 -85.9	5.4 13.2	- -	- -	- -	- -
13	Left Middle B-Pillar	2296	-687	-923	pos. neg.	- -	- -	97.4 -28.0	5.6 61.6	- -	- -	- -	- -
14	Left Lower A-Pillar	3415	-659	-392	pos. neg.	- -	- -	87.6 -73.7	5.2 10.2	- -	- -	- -	- -
15	Left Middle A-Pillar	3261	-686	-981	pos. neg.	- -	- -	21.4 -2.4	11.8 83.9	- -	- -	- -	- -
16	Front Seat Track	2465	-573	-246	pos. neg.	- -	- -	43.7 -10.4	16.6 33.8	- -	- -	- -	- -
17	Rear Seat Track	1356	-614	-534	pos. neg.	- -	- -	20.2 -2.7	5.1 125.5	- -	- -	- -	- -
18	Vehicle CG	2675	-6	-381	pos. neg.	7.5 -9.3	25.4 45.8	44.0 -8.3	19.1 37.0	8.2 -7.7	39.5 43.2	44.2 -	19.1 -

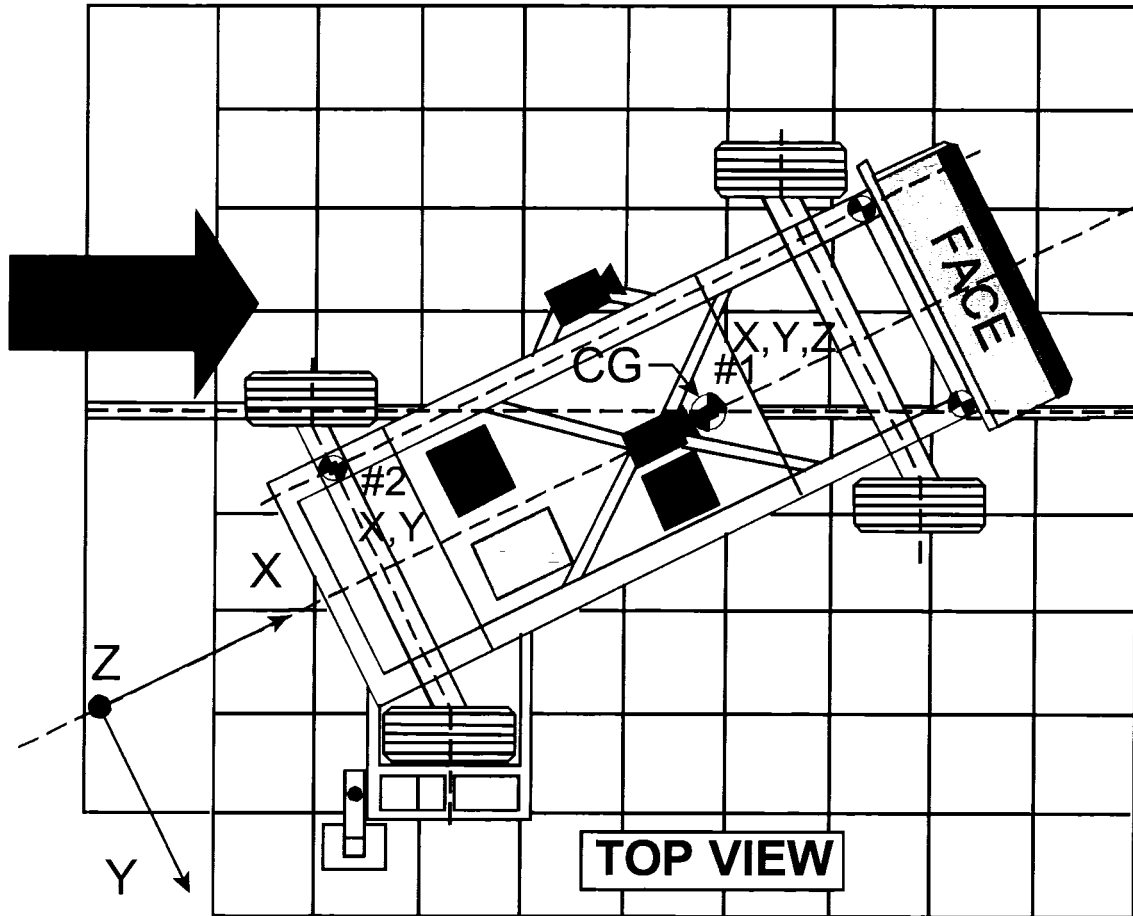
*Reference: X - Rear Bumper (+ Forward) Y - Vehicle Centerline (+ To Right) Z - Ground Level (+ Down)

DATA SHEET 14

MDB ACCELEROMETER LOCATIONS AND DATA SUMMARY

Vehicle: 2007 Buick LaCrosse 4-Door Sedan

NHTSA No. C70105



Accel. No.	Location	Coordinates (millimeters)			Pos. Direct.		Neg. Direct.	
		X*	Y*	Z*	Max (g)	Time (msec)	Max (g)	Time (msec)
1	MDB Center of Gravity							
	Longitudinal... X	1859	0	-330	1.3	97.7	-17.2	30.4
	Lateral..... Y				8.1	44.6	-2.8	63.9
	Vertical..... Z				12.1	43.5	-14.5	26.8
	Resultant..... R				21.8	26.5		
2	Rear Frame Member							
	Longitudinal... X	386	-660	-660	1.8	89.4	-20.1	40.4
	Lateral..... Y				3.1	46.3	-2.7	62.7

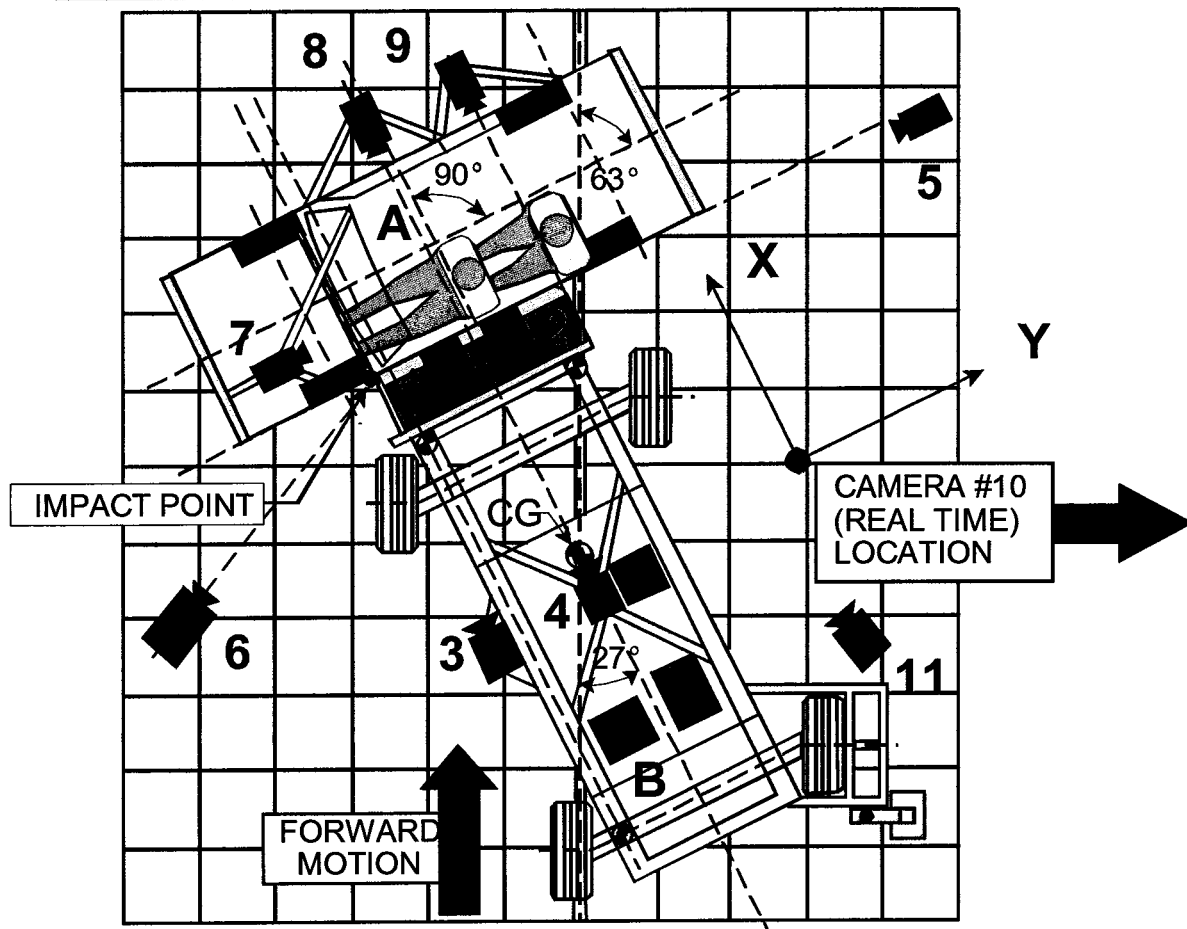
*Reference: X = Rear Bumper (+ Forward)
Y = Vehicle Centerline (+ To Right)
Z = Ground Level (+ Down)
All measurements accurate to within ± 3 mm.

DATA SHEET 15

HIGH SPEED CAMERA LOCATIONS AND DATA SUMMARY

Vehicle: 2007 Buick LaCrosse 4-Door Sedan

NHTSA No. C70105



Camera No.	View	Coordinates (millimeters)			Angle (deg.)	Lens (mm)	Film Speed (fps)
		X*	Y*	Z*			
1	Overhead view of test vehicle	72	812	-4880	-90	8	1000
2	Overhead closeup view of impact plane	195	855	-4880	-90	12.5	1000
3	MDB onboard closeup view of impact point	-1470	0	-847	0	13	500
4	MDB onboard view of driver dummy	-1140	838	-1586	-17	7.5	500
5	Right side ground level overall view	450	10480	-1010	-25.0	25	1000
6	Left side ground level overall view	-2040	-1592	-900	-3.9	28	1000
7	Test vehicle onboard driver front view	510	-415	-1286	-11.0	28	1000
8	Test vehicle onboard driver side view	1656	948	-1044	-5.8	12.5	1000
9	Test vehicle onboard passenger side view	1658	1795	-1102	-11.0	12.5	1000
10	Real time film coverage of test	-	-	-	-	-	24

* Reference (from point of impact); all measurements accurate to within ± 6 mm.

X = (Impact Point) + Forward

Y = (Impact Point) + To Right

Z = (Ground Level) + Down

SECTION 5

FUEL SYSTEM INTEGRITY

DATA SHEET 16

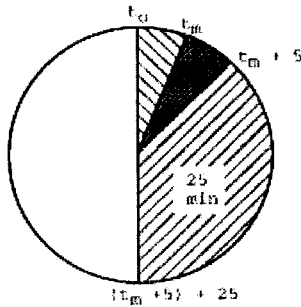
FMVSS 301 FUEL SYSTEM INTEGRITY DATA

NHTSA No.: C70105 TEST DATE: April 6, 2007
 Vehicle Mfr./Make/Model: General Motors Corporation 2007 Buick LaCrosse 4-Door Sedan

TEST VEHICLE IMPACT TYPE:

- Frontal (48.28 kph)
- Oblique (48.28 kph) with - ° barrier face first
 contacting the - side
 (driver/passenger)
- Rear Moving Barrier (48.28 kph)
- Lateral Moving Barrier (32.19 kph)
- X Side Impact Moving Deformable Barrier (52.6 kph)
 contacting the driver side side
 (driver/passenger)

FUEL SPILLAGE MEASUREMENT:



1. From impact until vehicle motion ceases
2. For five minute period after vehicle motion ceases
3. For next 25 minutes

ACTUAL	MAX ALLOWED
0 g	28 g
0 g	142 g
0 g	28 g/1 min.

SOLVENT SPILLAGE DETAILS:

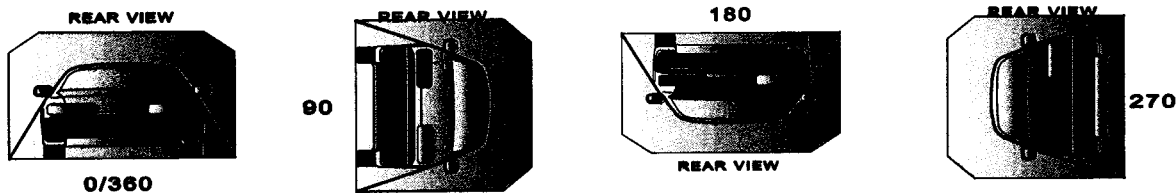
None

DATA SHEET 17

ROLLOVER DATA

Vehicle: 2007 Buick LaCrosse 4-Door Sedan

NHTSA No.: C70105



I. DETERMINATION OF SOLVENT COLLECTION TIME PERIOD:

Rollover Stage	Rotation Time (spec. 1 -3 min)				FMVSS 301 Hold Time		Total Time				Next Whole Minute Interval	
0° - 90°	§	minutes	§	seconds	5	minutes	§	minutes	§	seconds	§	minutes
90° - 180°	§	minutes	§	seconds	5	minutes	§	minutes	§	seconds	§	minutes
180°-270°	§	minutes	§	seconds	5	minutes	§	minutes	§	seconds	§	minutes
270°-360°	§	minutes	§	seconds	5	minutes	§	minutes	§	seconds	§	minutes

II. FMVSS 301 REQUIREMENTS: (Maximum allowable solvent spillage):

First 5 minutes from onset of rotation	6th min.	7th min.	8th min. (if required)
142 g	28 g	28 g	28 g

III. ACTUAL TEST VEHICLE SOLVENT SPILLAGE:

Rollover Stage	First 5 minutes from onset of rotation (g)	6th min. (g)	7th min. (g)	8th min. (if required) (g)
0° - 90°	§	§	§	N/A
90° - 180°	§	§	§	N/A
180°-270°	§	§	§	N/A
270°-360°	§	§	§	N/A

Note: Record spillage for whole minute intervals only as determined above.

IV. SOLVENT SPILLAGE LOCATION(S):

Rollover Stage	Spillage Location
0° - 90°	§
90° - 180°	§
180°-270°	§
270°-360°	§

§ The rollover portion of the FMVSS 301 for this vehicle was not performed as per instructed by the COTR.

APPENDIX A

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Figure A- 31	PRE-TEST LEFT OCCUPANT COMPARTMENT VIEW OF REAR SID	A- 33
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Figure A- 46	ROLLOVER 360 DEGREES (Not Applicable)	A- 48

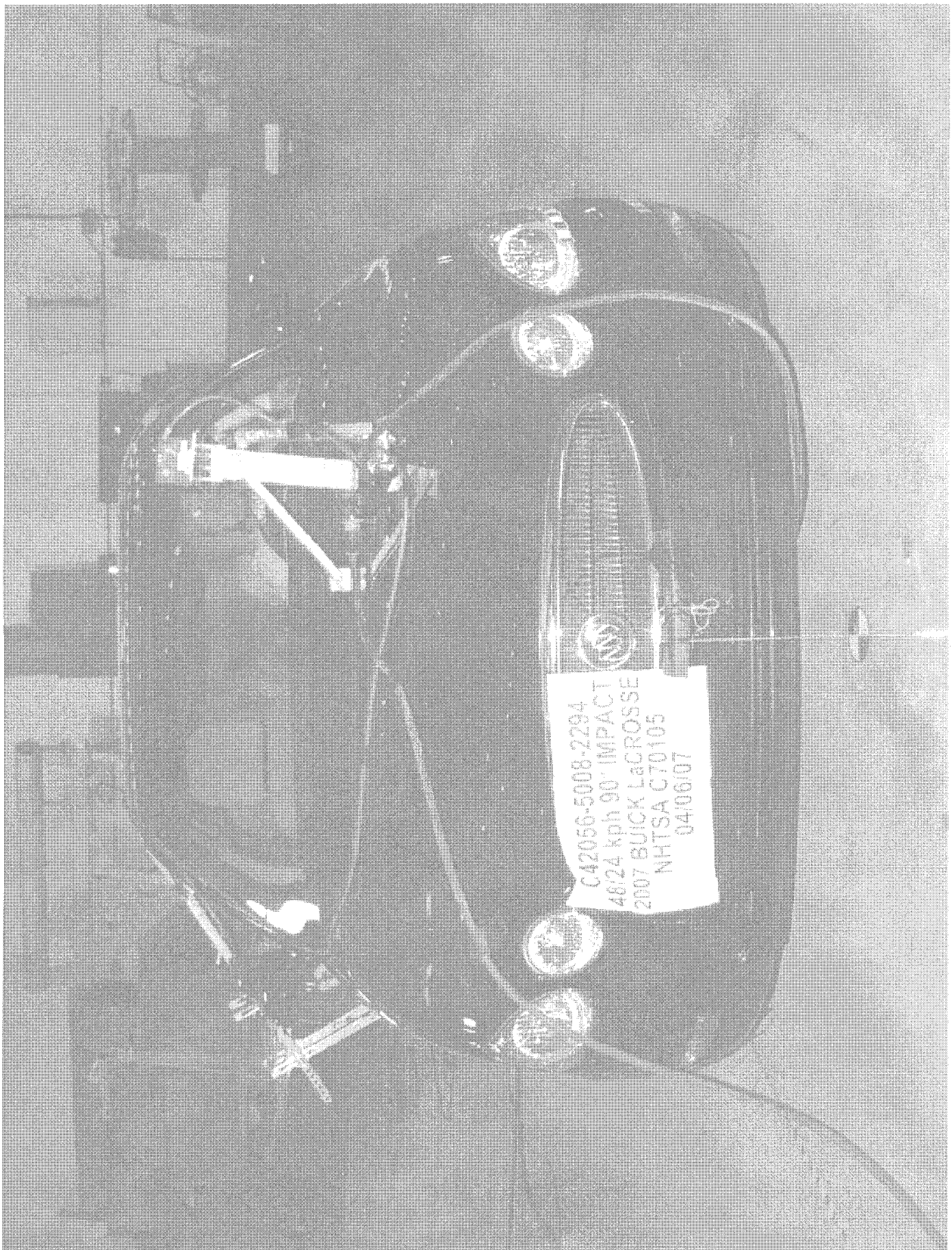


Figure A-1 PRE-TEST FRONTAL VIEW OF TEST VEHICLE

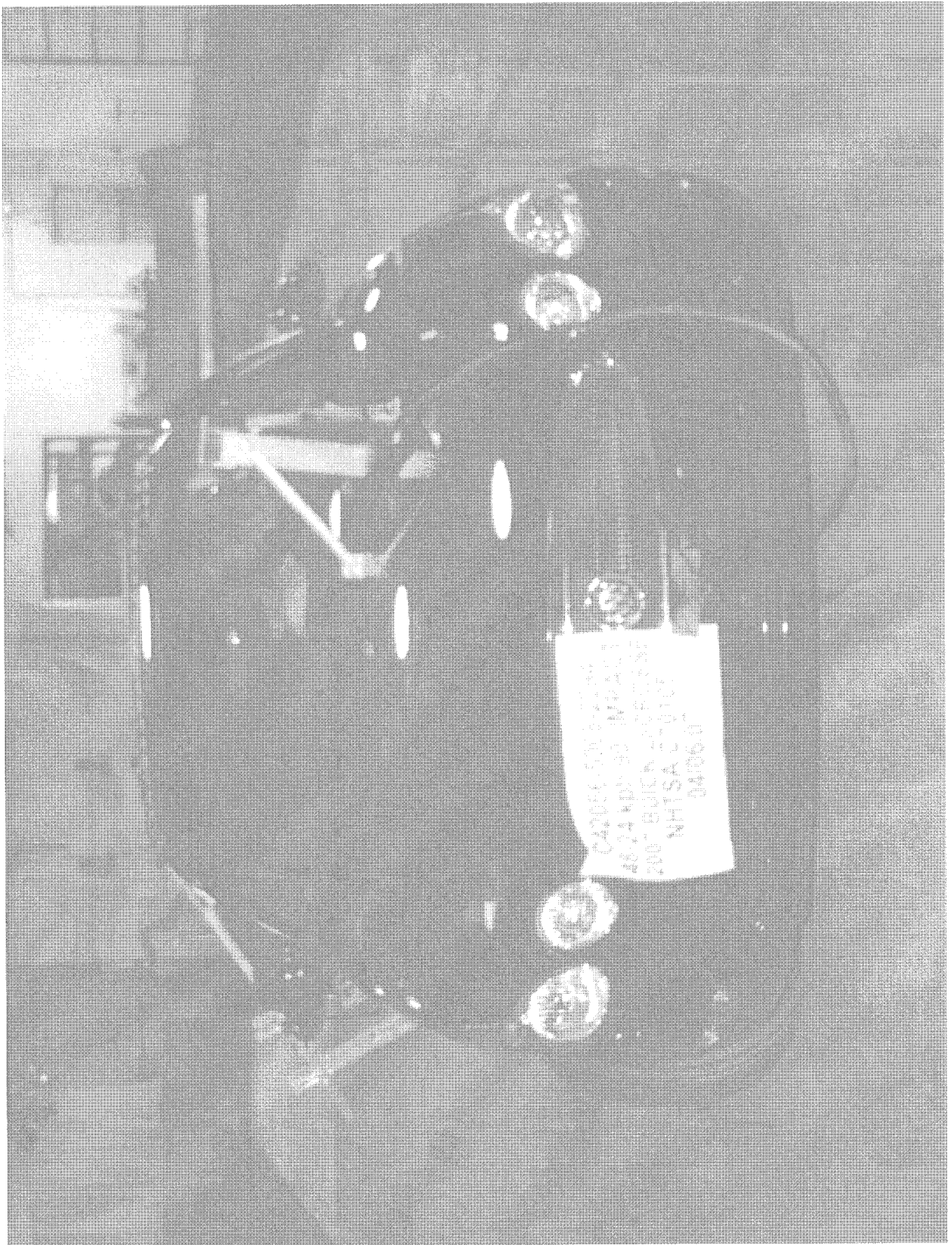


Figure A-2 POST-TEST FRONTAL VIEW OF TEST VEHICLE

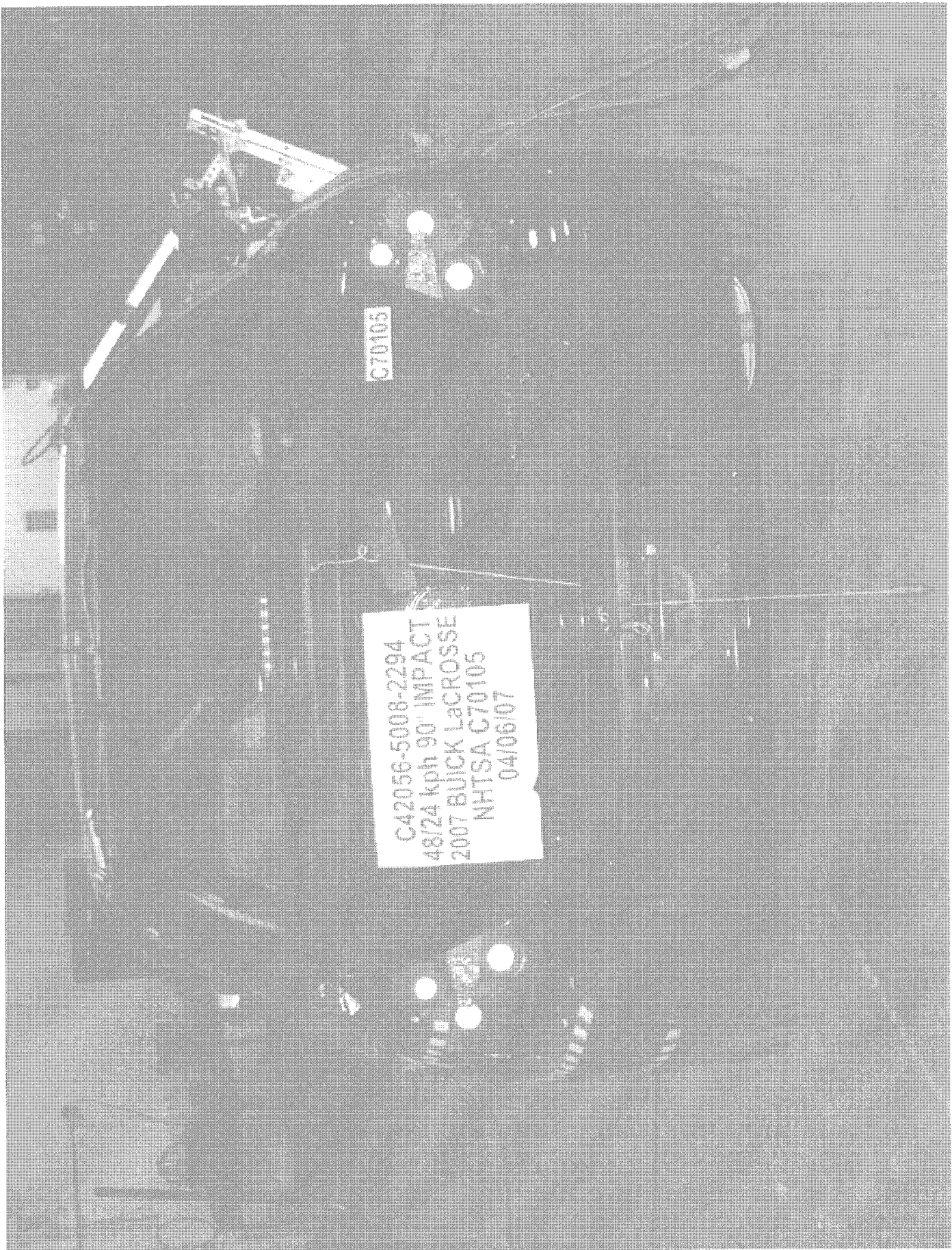


Figure A-3 PRE-TEST REAR VIEW OF TEST VEHICLE

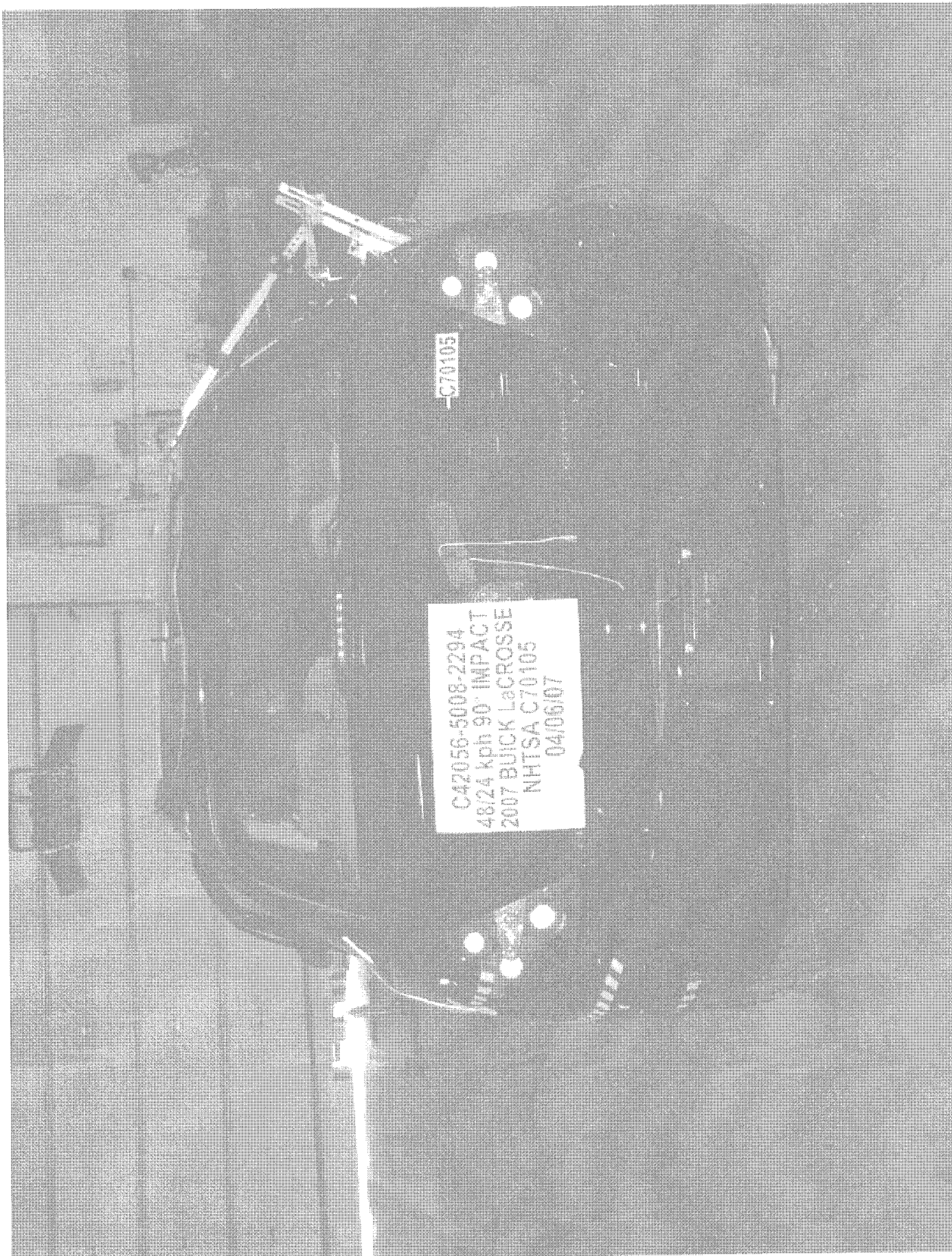


Figure A-4 POST-TEST REAR VIEW OF TEST VEHICLE

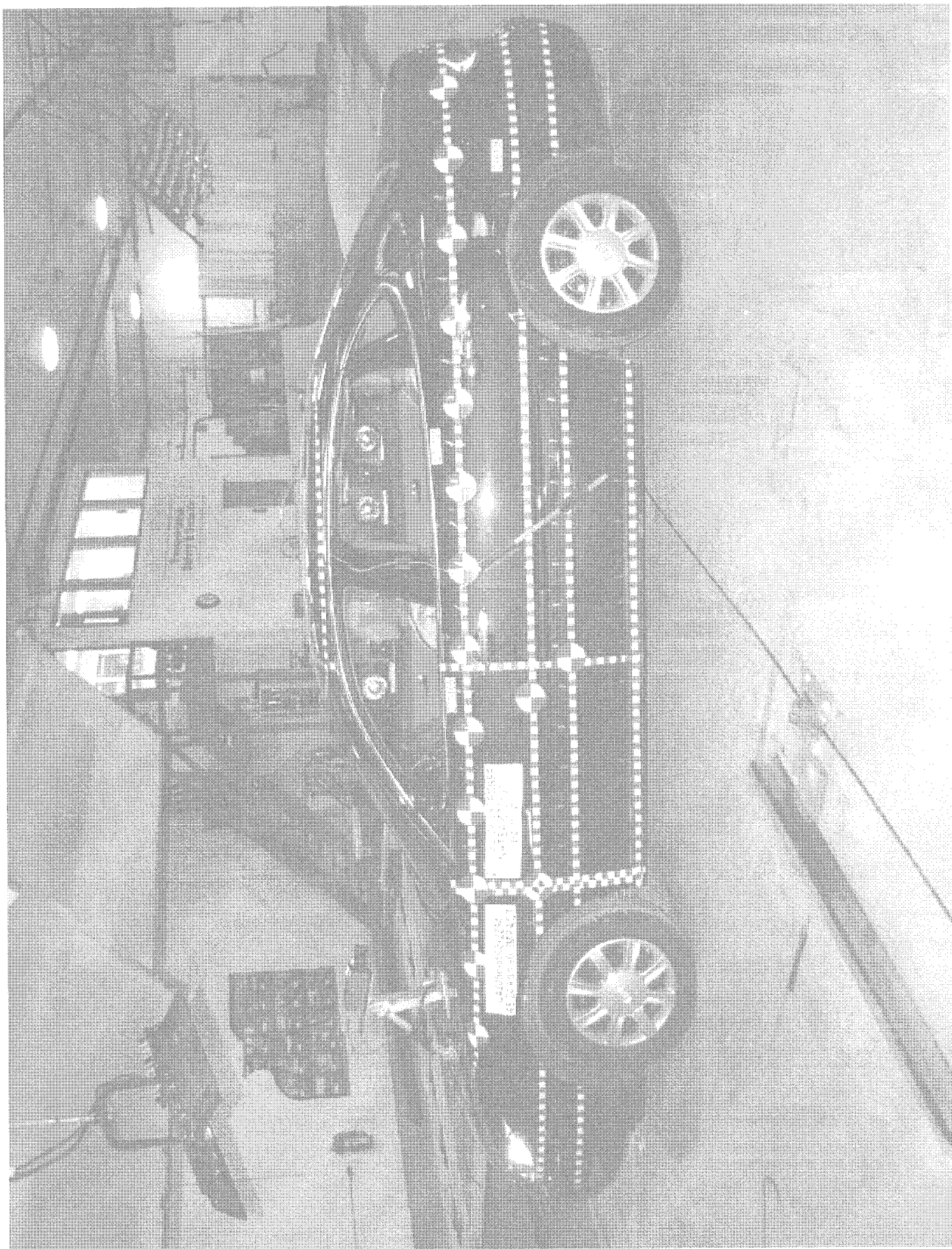


Figure A-5 PRE-TEST IMPACTED SIDE VIEW OF TEST VEHICLE

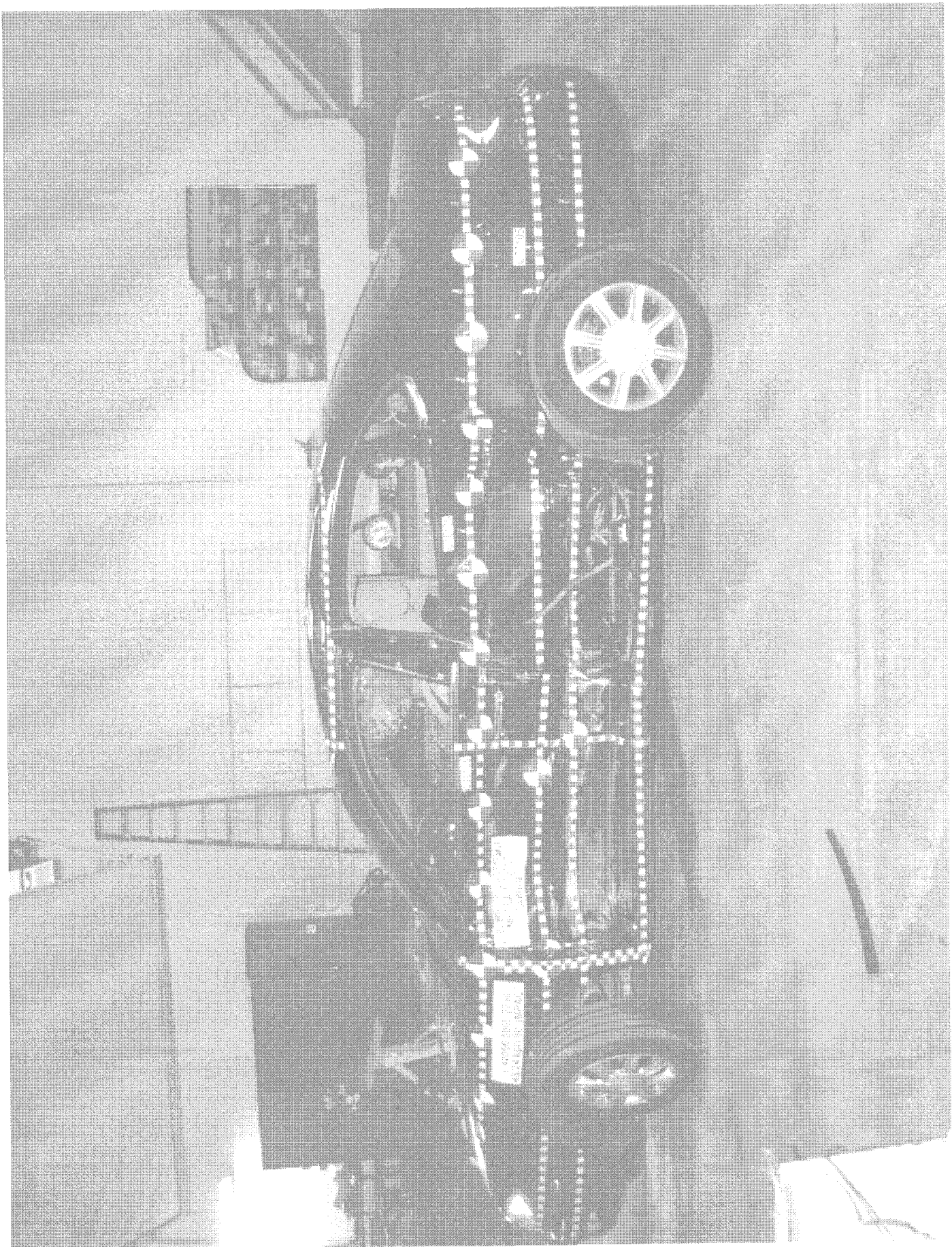


Figure A-6 POST-TEST IMPACTED SIDE VIEW OF TEST VEHICLE



Figure A-7 PRE-TEST LEFT FRONT VIEW OF TEST VEHICLE

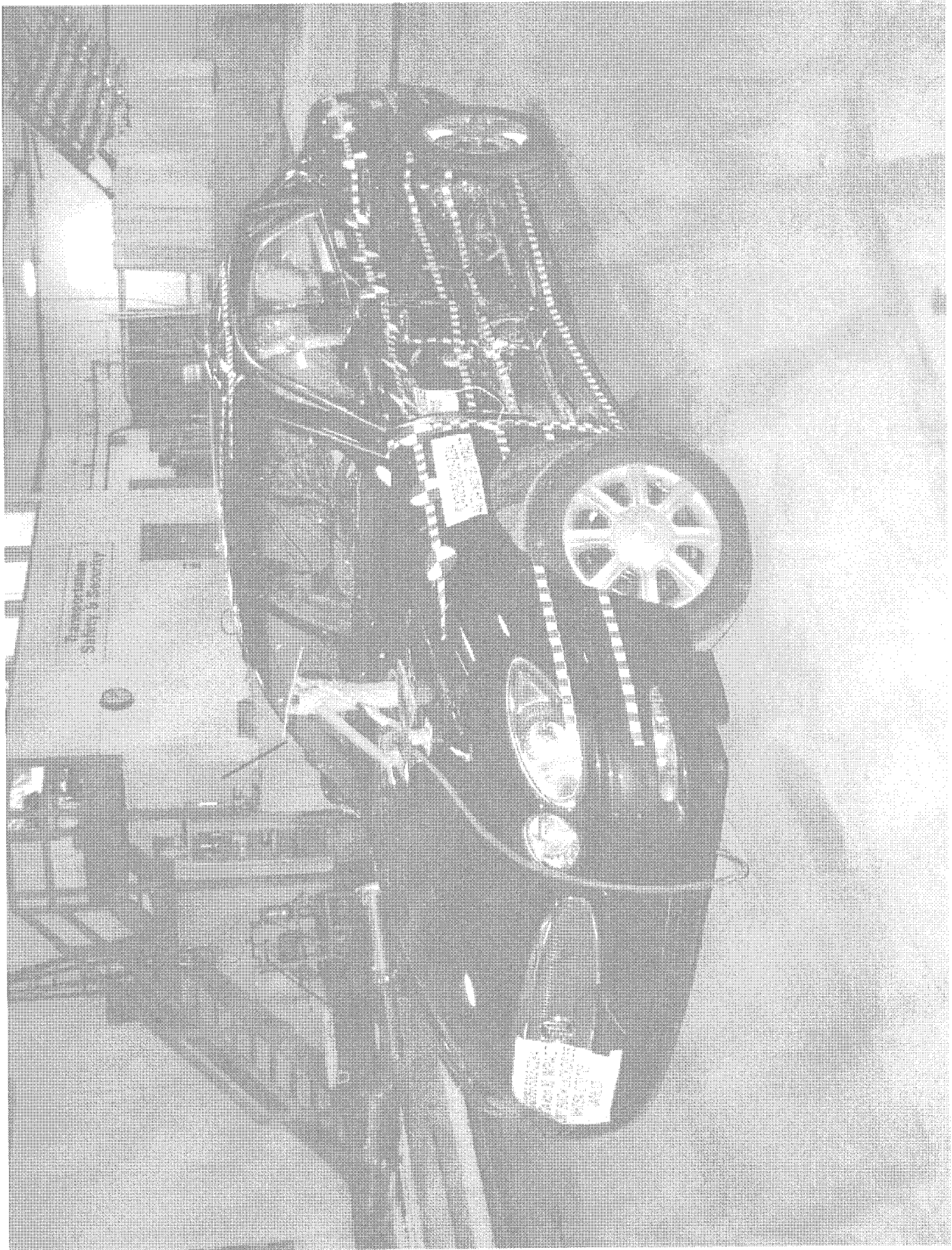


Figure A-8 POST-TEST LEFT FRONT VIEW OF TEST VEHICLE

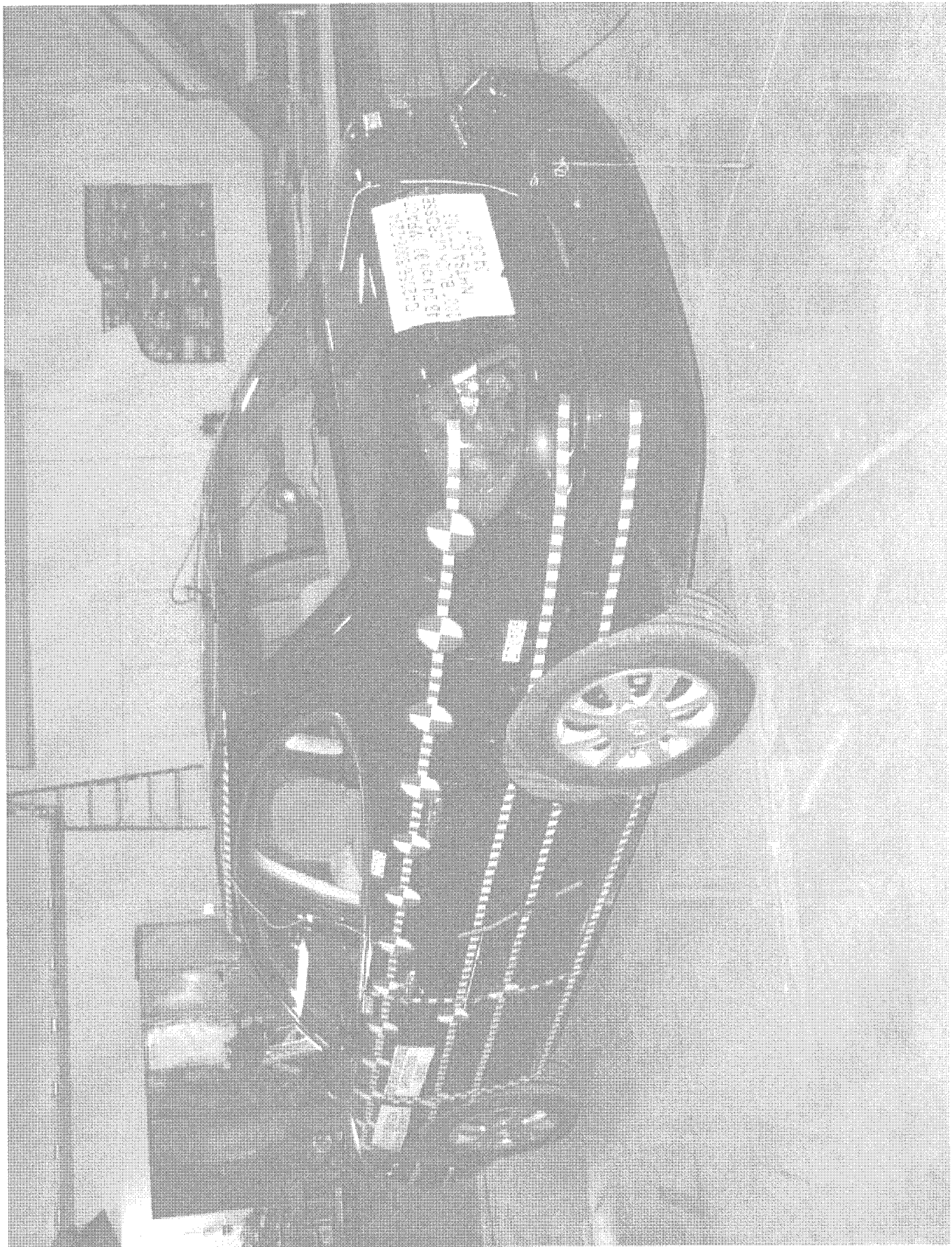


Figure A-9 PRE-TEST LEFT REAR VIEW OF TEST VEHICLE



Figure A-10 POST-TEST LEFT REAR VIEW OF TEST VEHICLE

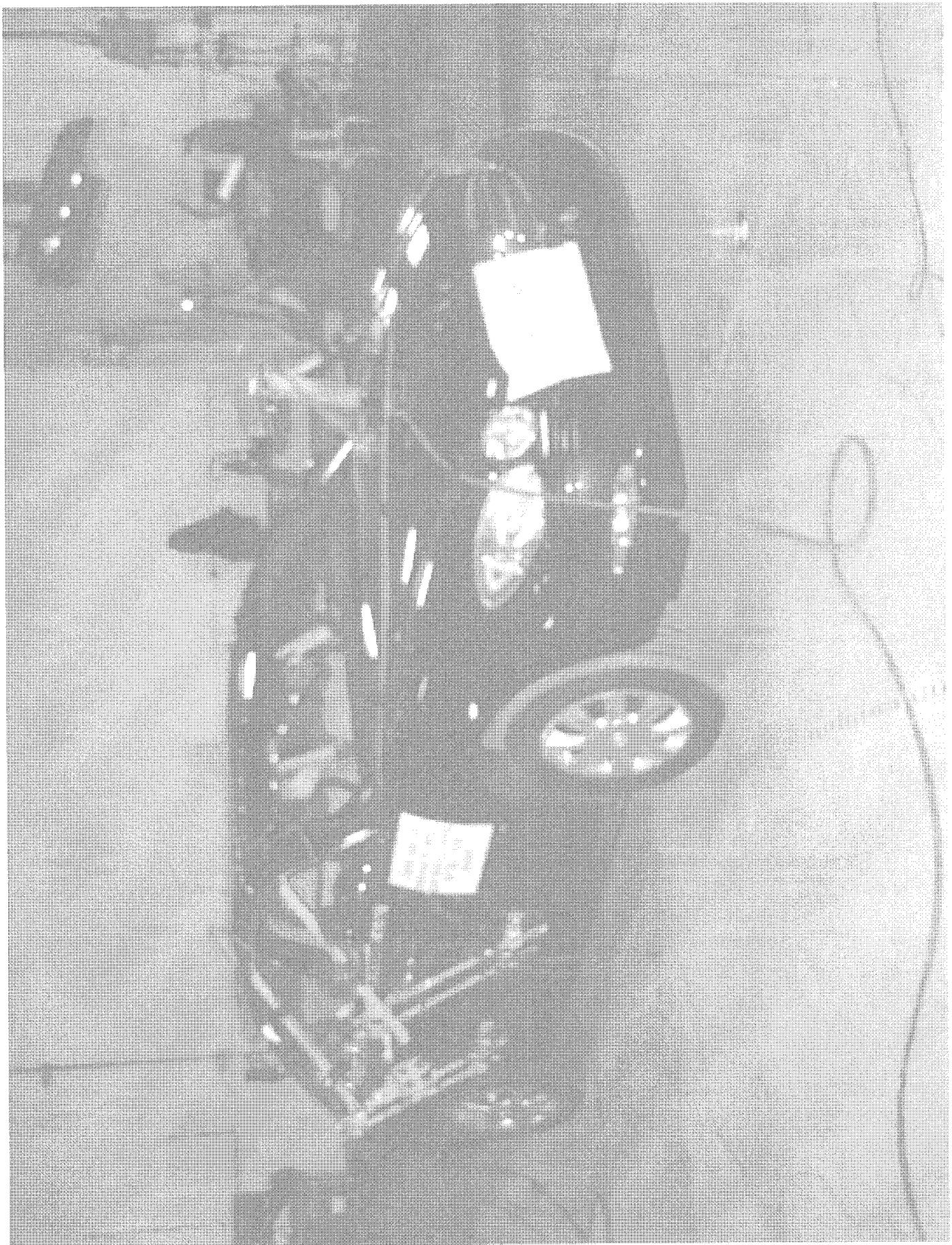


Figure A-11 PRE-TEST RIGHT FRONT VIEW OF TEST VEHICLE

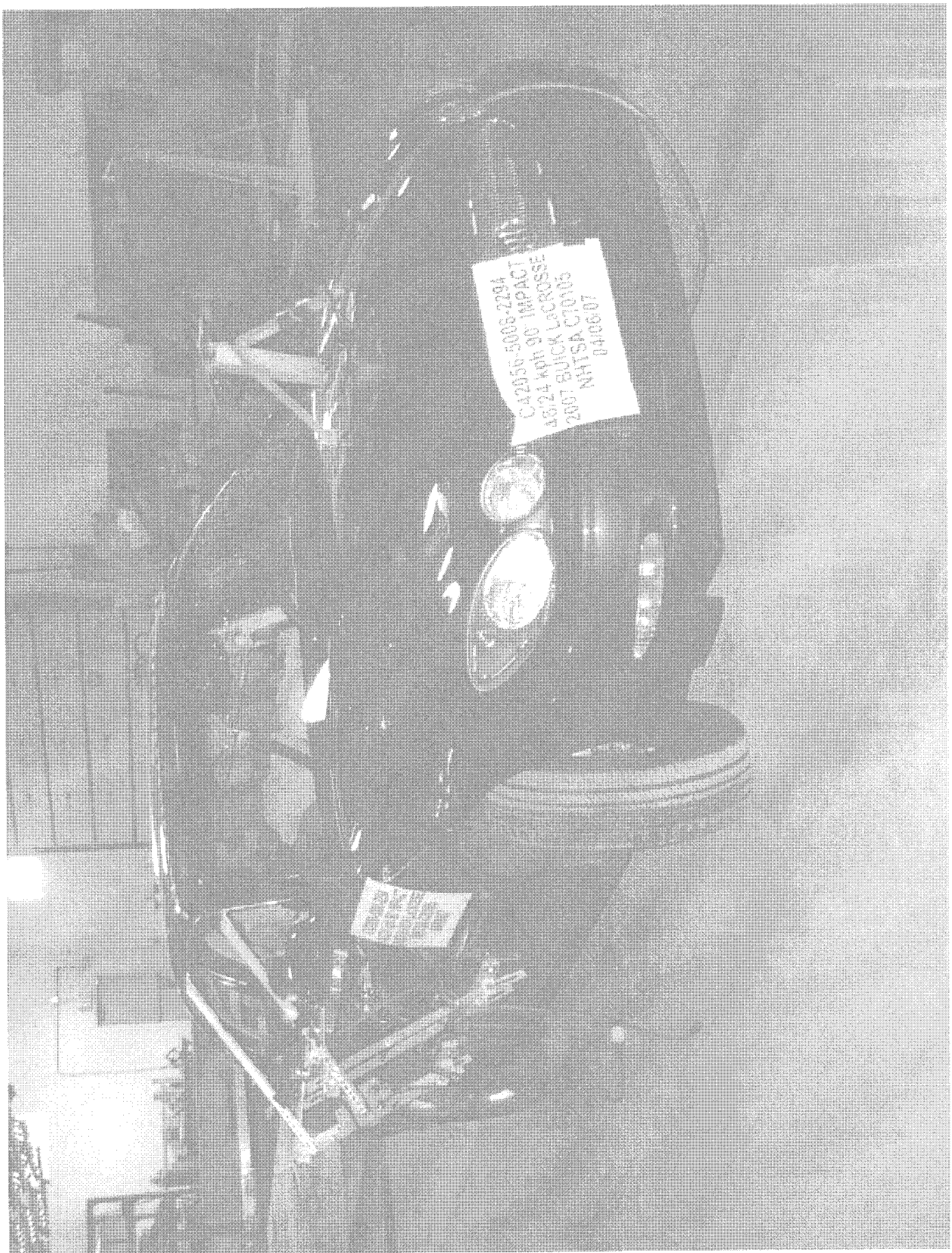


Figure A-12 POST-TEST RIGHT FRONT VIEW OF TEST VEHICLE

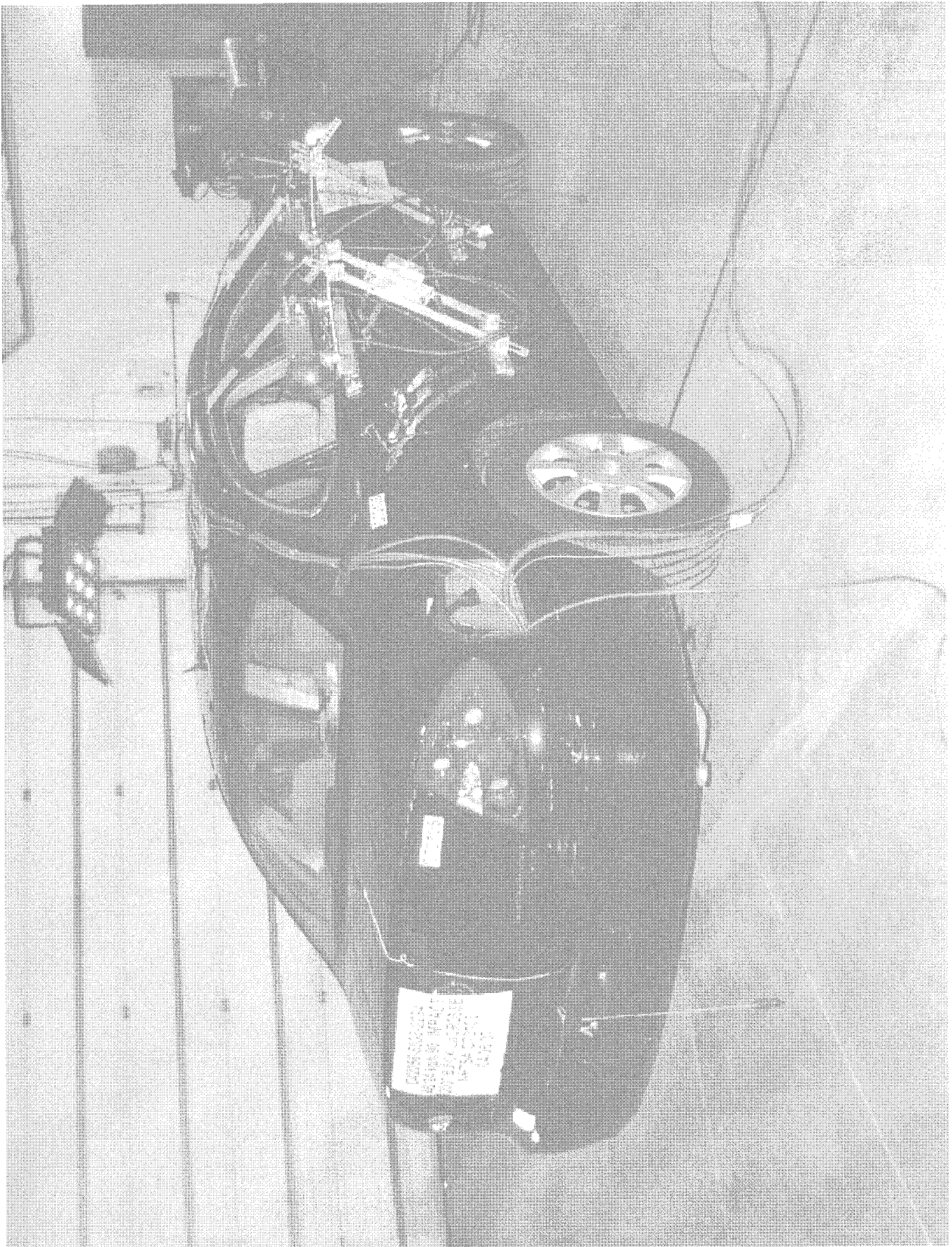


Figure A-13 PRE-TEST RIGHT REAR VIEW OF TEST VEHICLE



Figure A-14 POST-TEST RIGHT REAR VIEW OF TEST VEHICLE

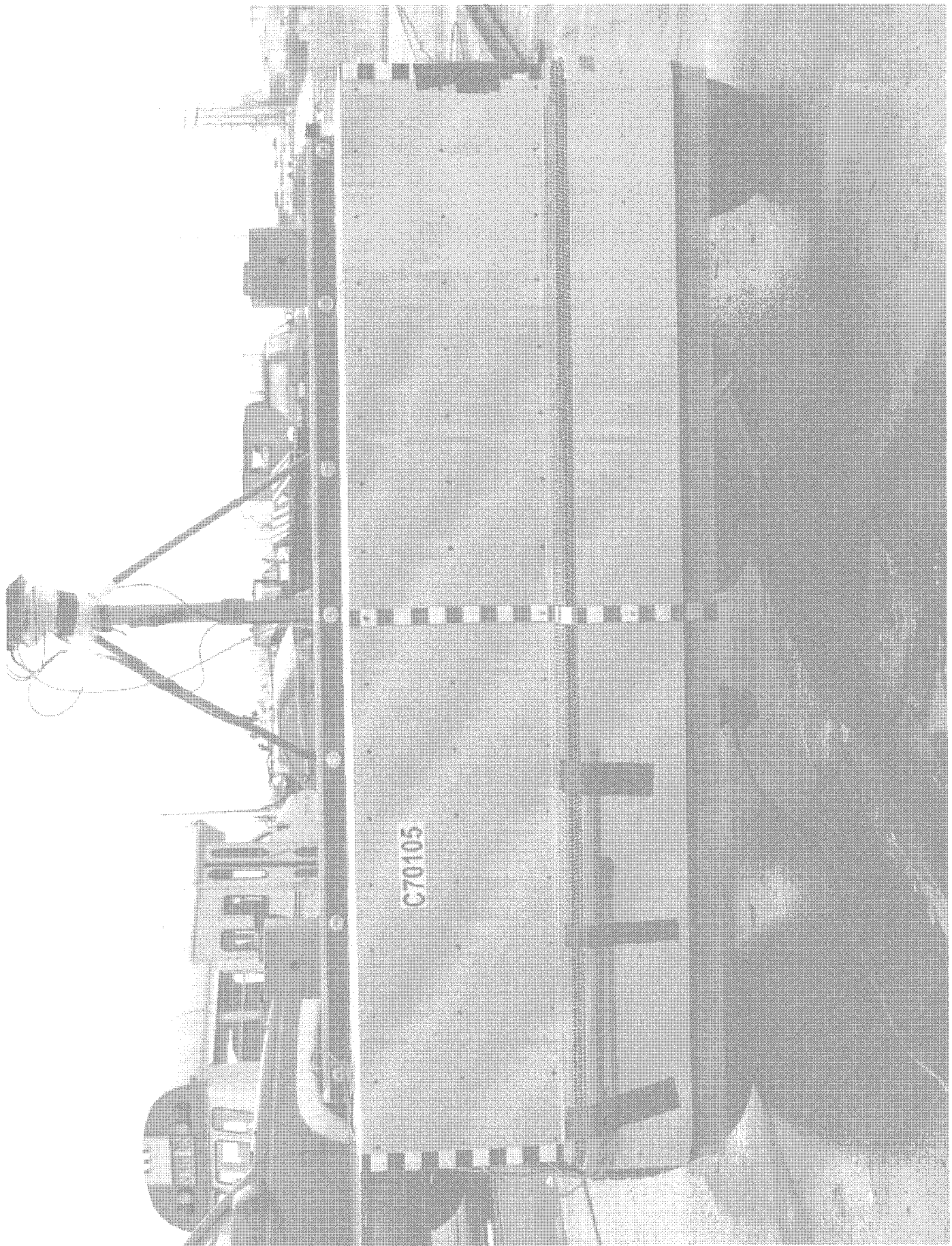


Figure A-15 PRE-TEST FRONTAL VIEW OF IMPACTOR FACE

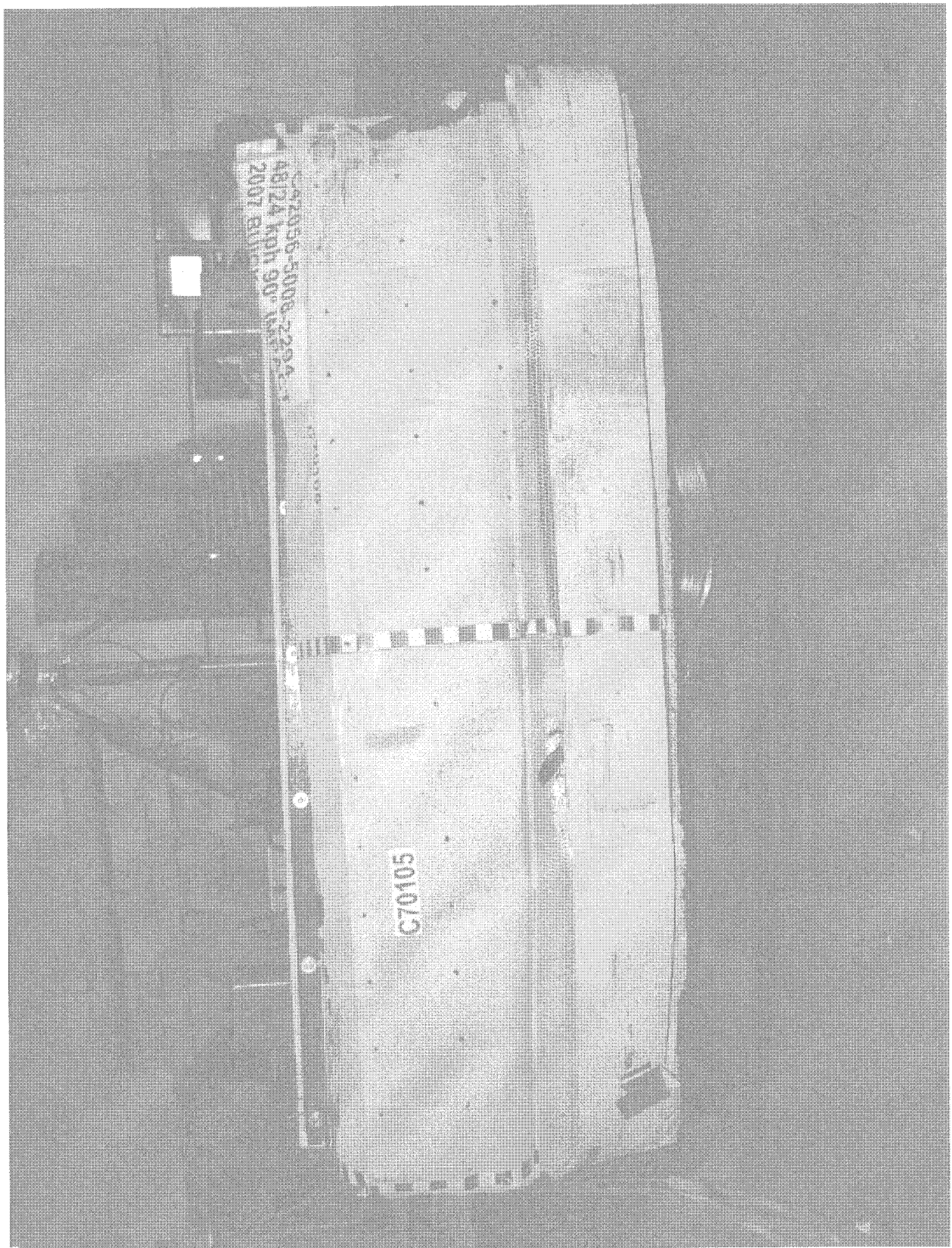


Figure A-16 POST-TEST FRONTAL VIEW OF IMPACTOR FACE

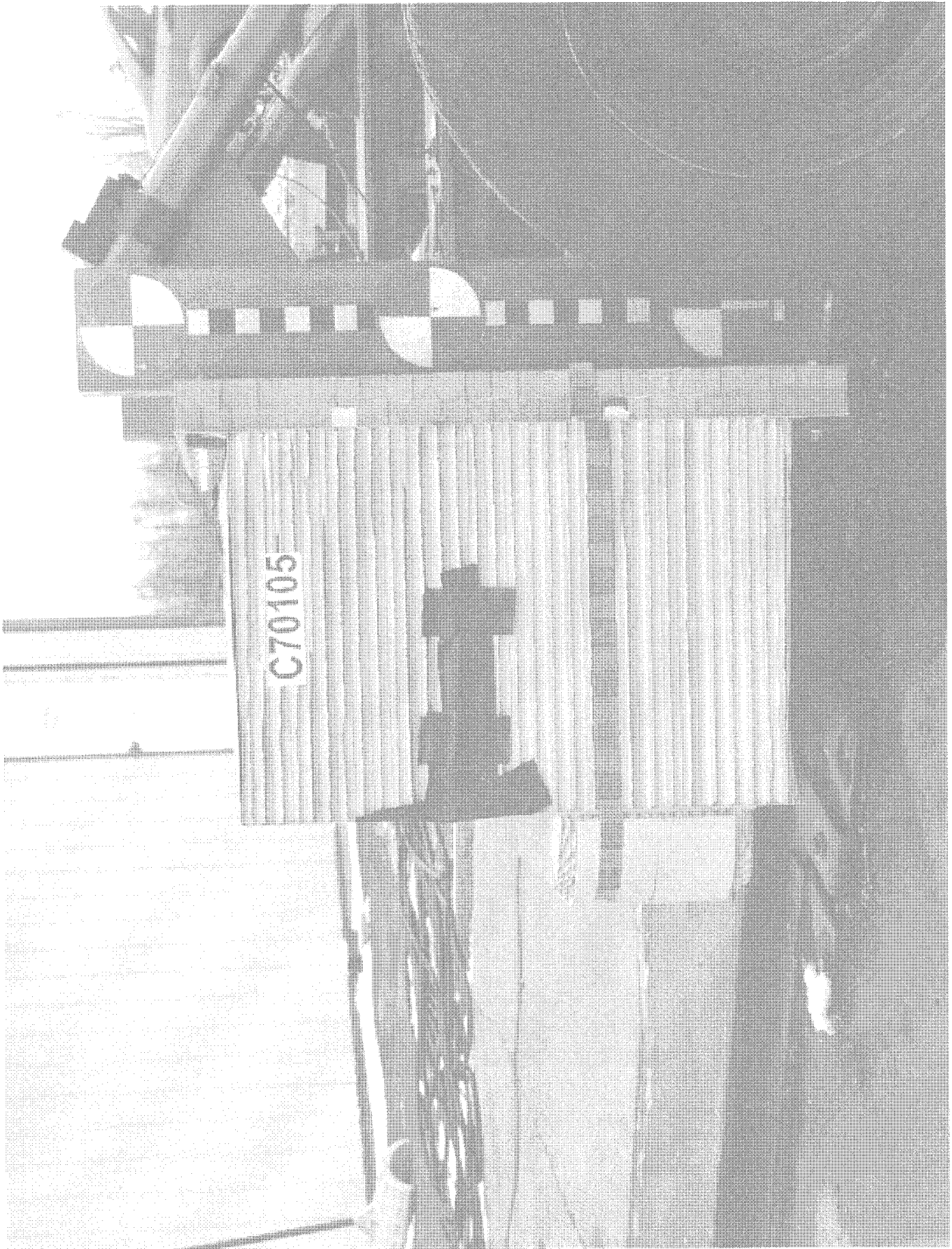


Figure A-17 PRE-TEST LEFT SIDE VIEW OF IMPACTOR FACE



Figure A-38 POST-TEST LEFT SIDE VIEW OF IMPACTOR FACE

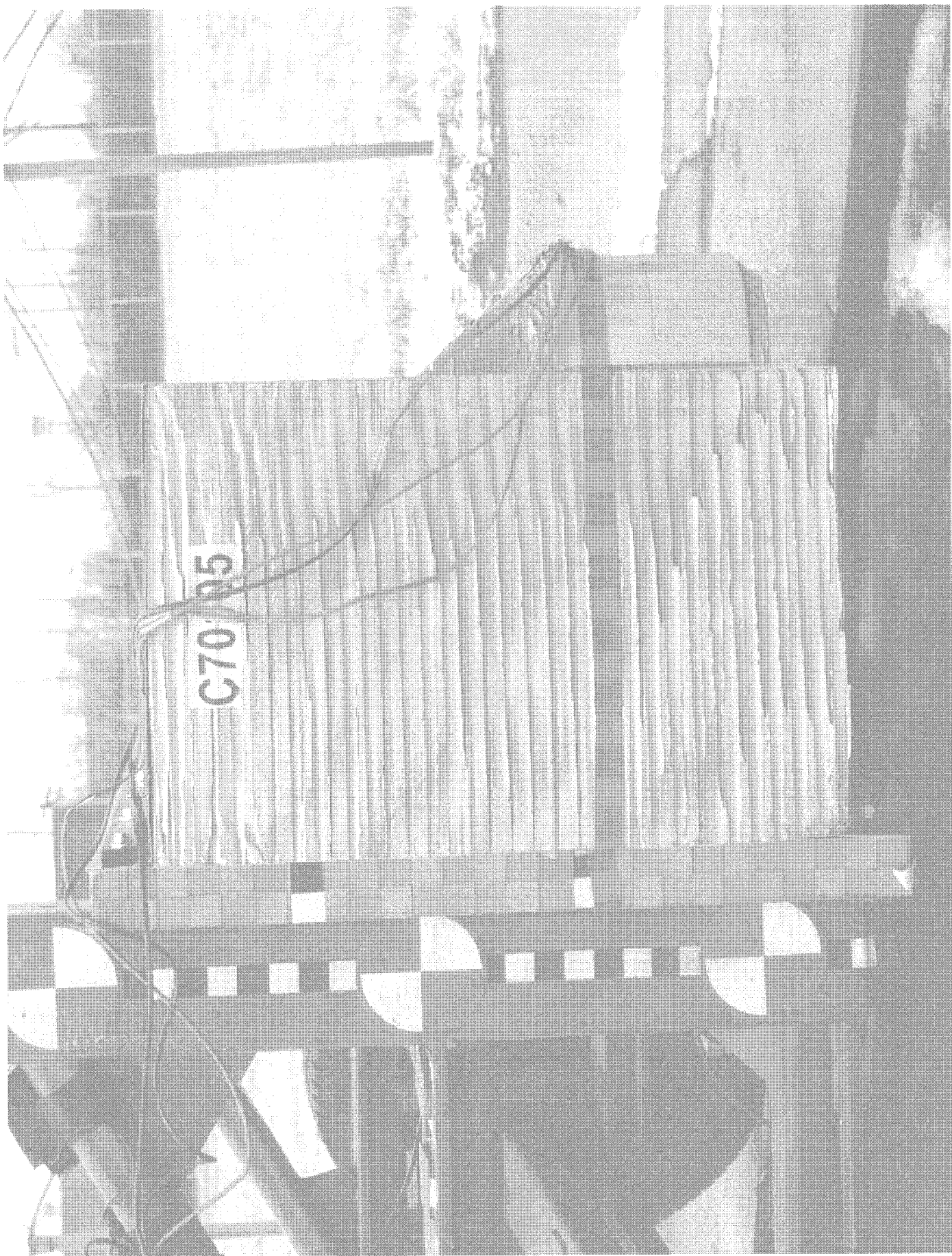


Figure A-19 PRE-TEST RIGHT SIDE VIEW OF IMPACTOR FACE



Figure A-20 POST-TEST RIGHT SIDE VIEW OF IMPACTOR FACE

Figure A-21 PRE-TEST TOP VIEW OF IMPACTOR FACE

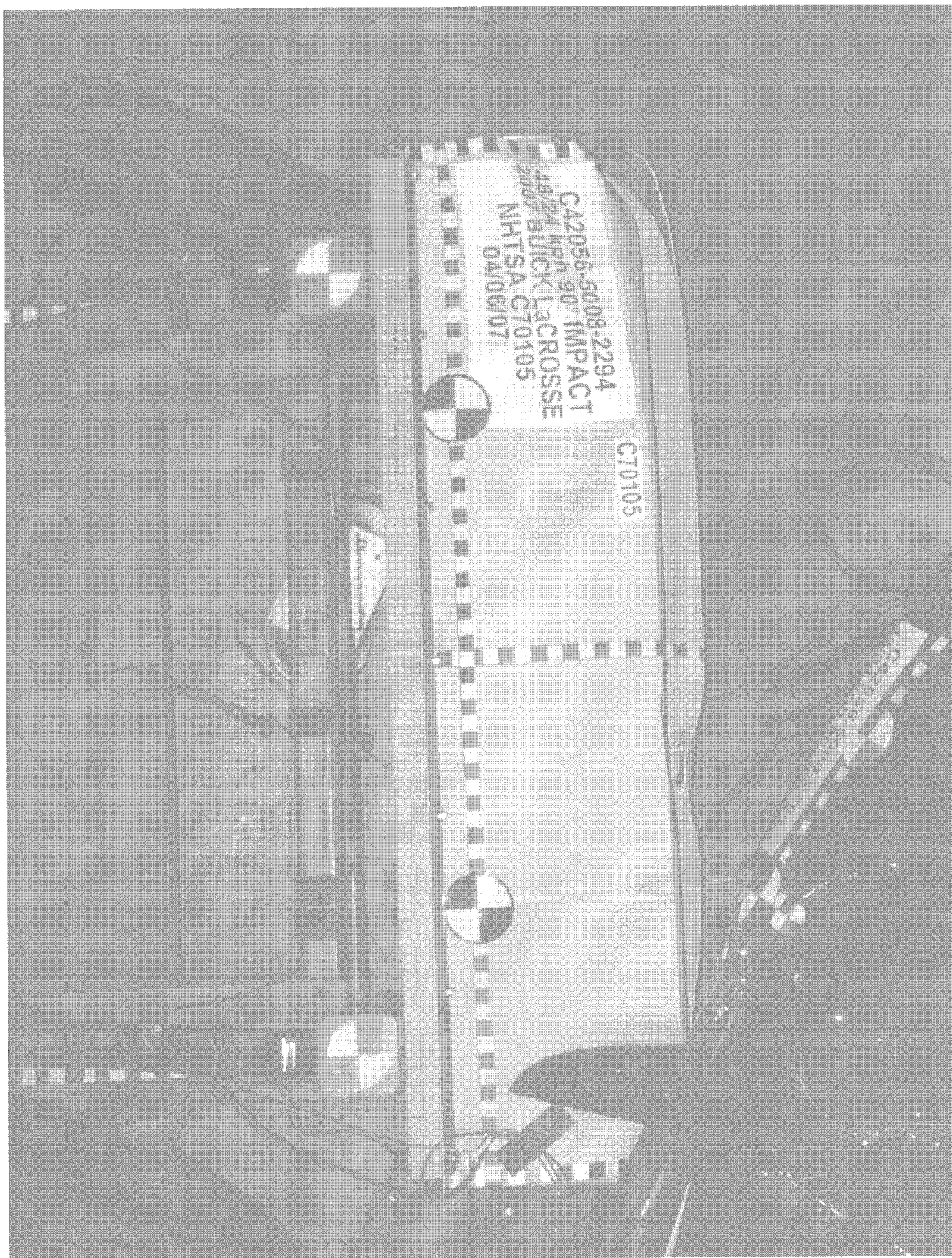


Figure A-22 POST-TEST TOP VIEW OF IMPACTOR FACE

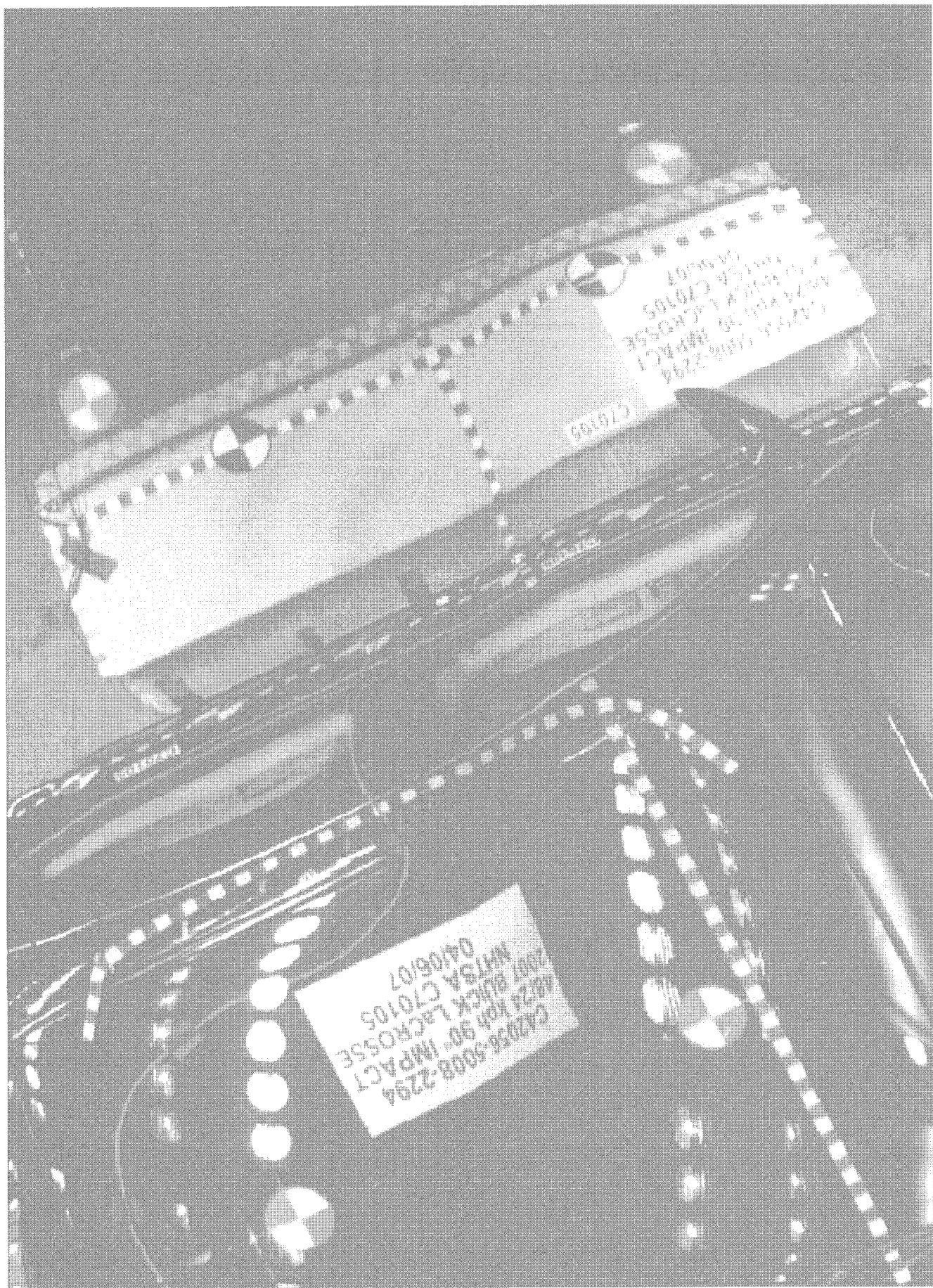


Figure A-23 PRE-TEST OVERHEAD VIEW OF ALIGNED MDB AND VEHICLE

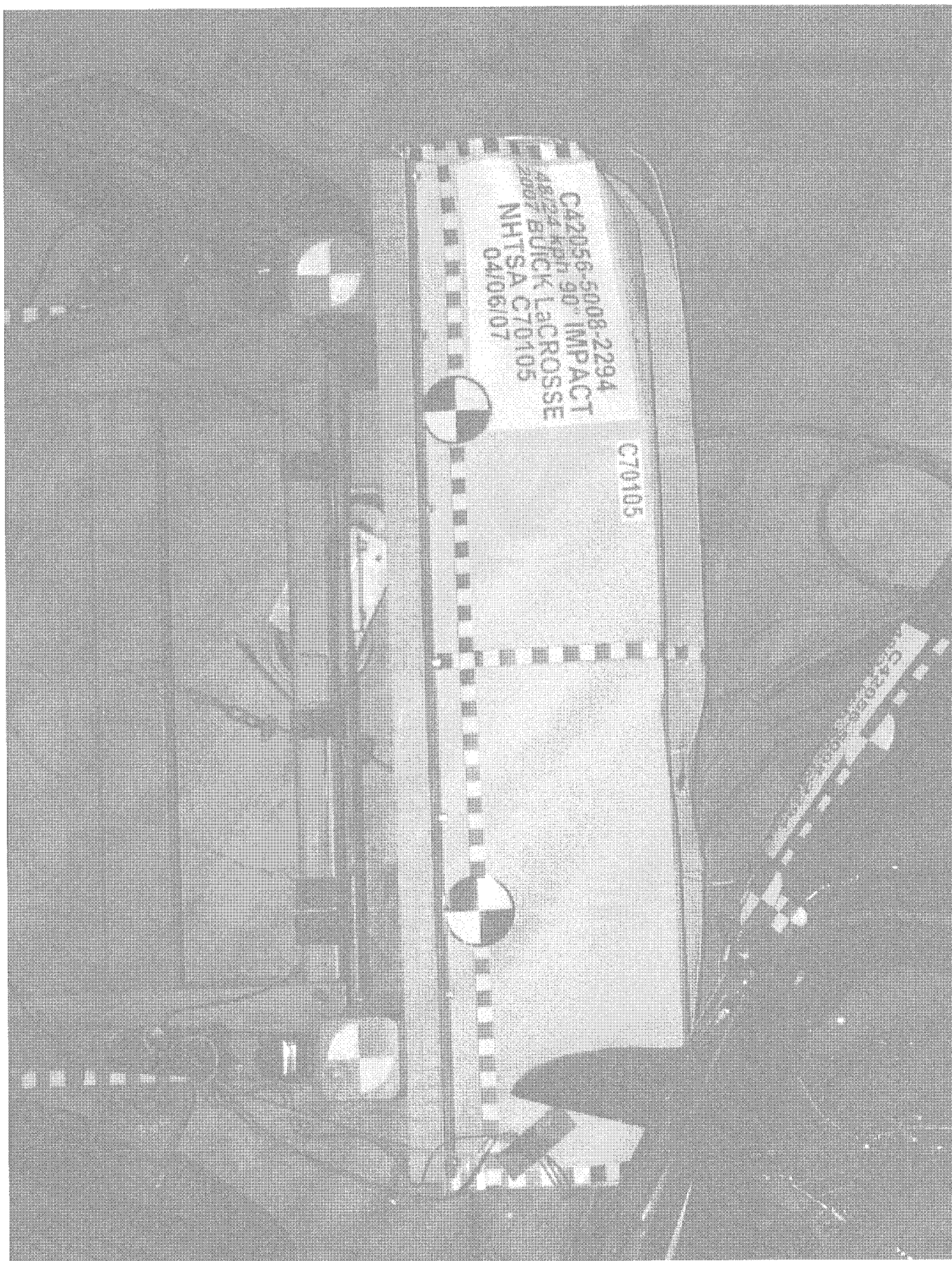


Figure A-24 POST-TEST OVERHEAD VIEW OF MDB AND VEHICLE



Figure A-25 PRE-TEST RIGHT OCCUPANT COMPARTMENT VIEW OF FRONT SID



Figure A-26 POST-TEST RIGHT OCCUPANT COMPARTMENT VIEW OF FRONT SID



Figure A-27 PRE-TEST RIGHT OCCUPANT COMPARTMENT VIEW OF REAR SID



Figure A-28 POST-TEST RIGHT OCCUPANT COMPARTMENT VIEW OF REAR SID

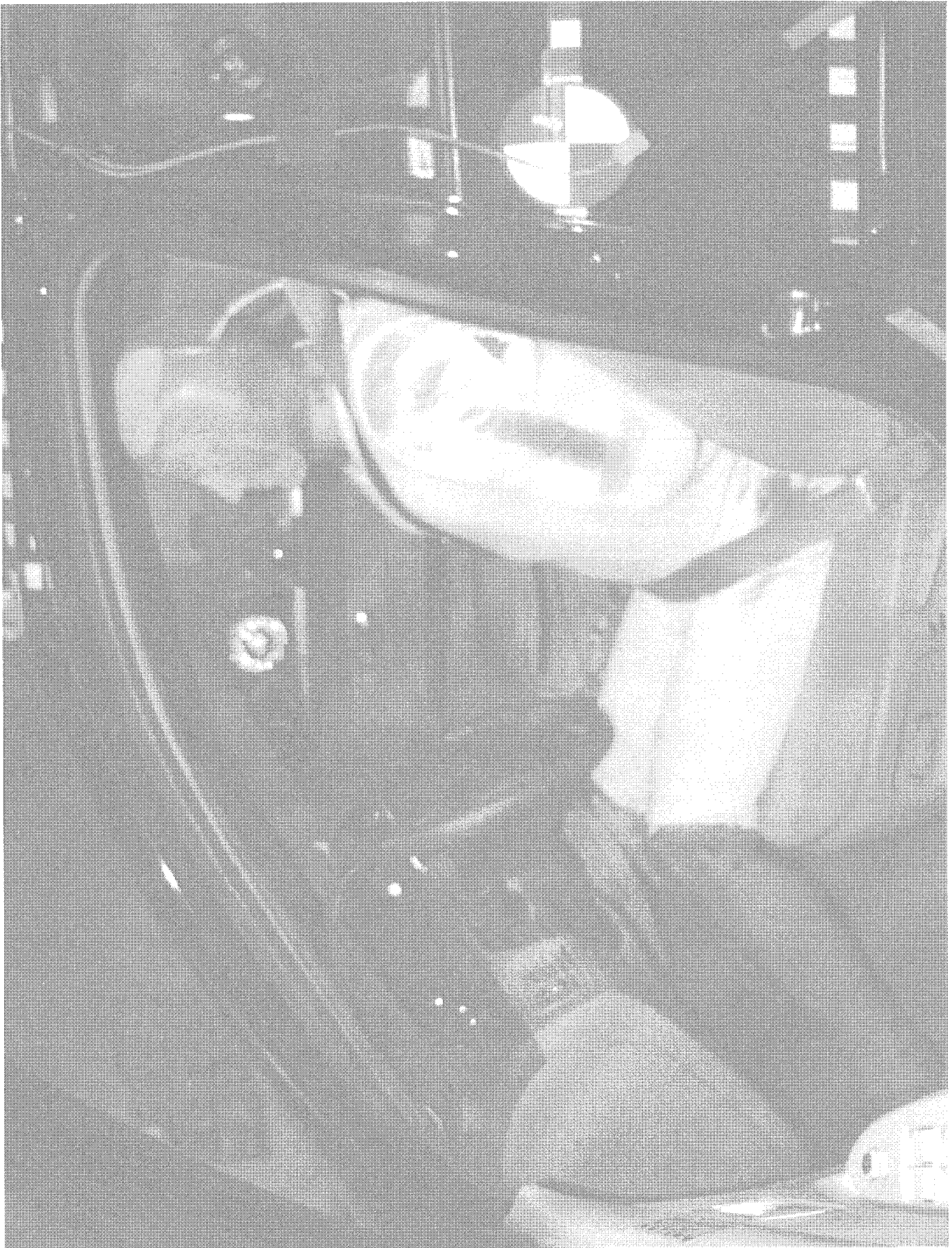


Figure A-29 PRE-TEST LEFT OCCUPANT COMPARTMENT VIEW OF FRONT SID



Figure A-30 POST-TEST LEFT OCCUPANT COMPARTMENT VIEW OF FRONT SID



Figure A-31 PRE-TEST LEFT OCCUPANT COMPARTMENT VIEW OF REAR SID

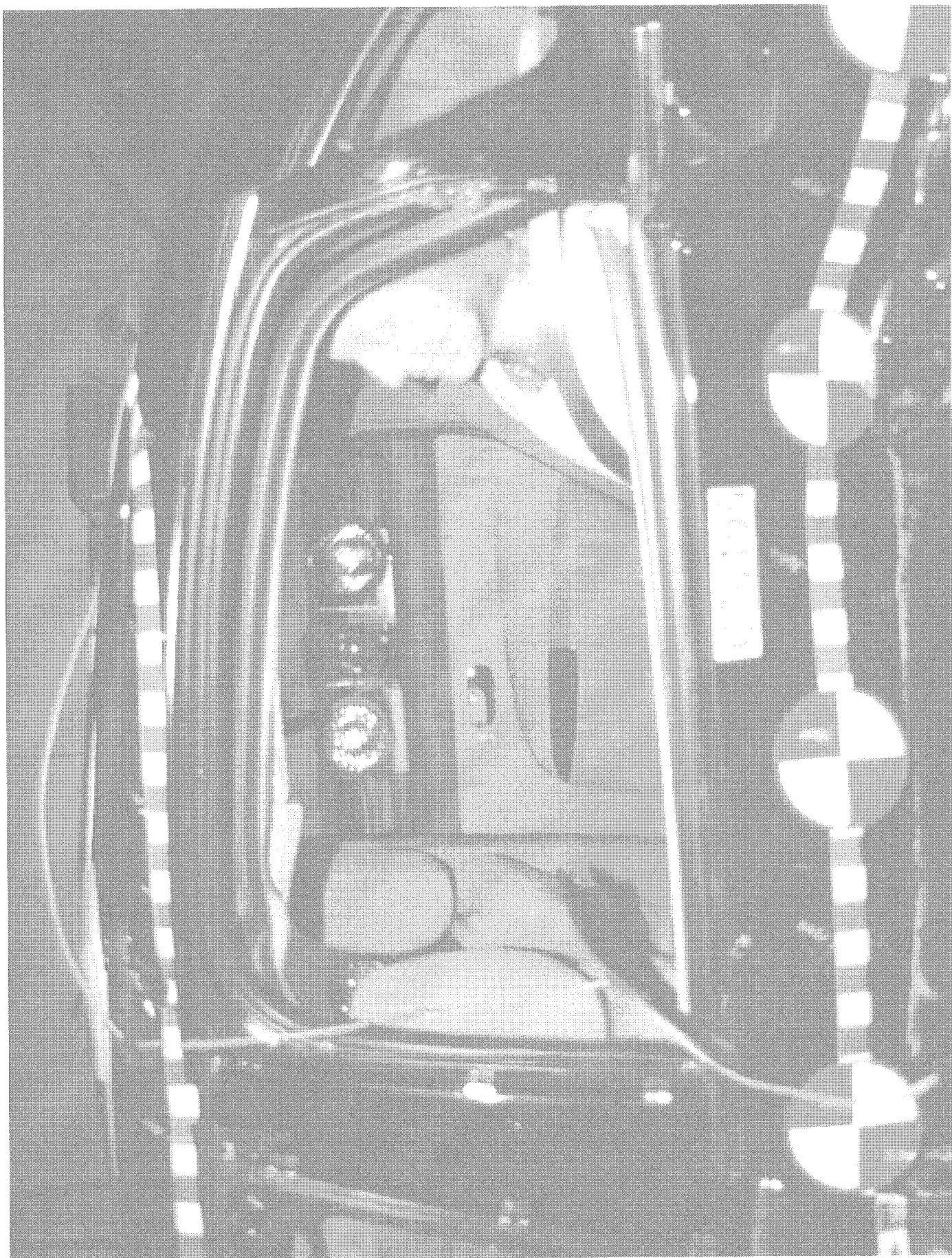


Figure A-32 POST-TEST LEFT OCCUPANT COMPARTMENT VIEW OF REAR SID

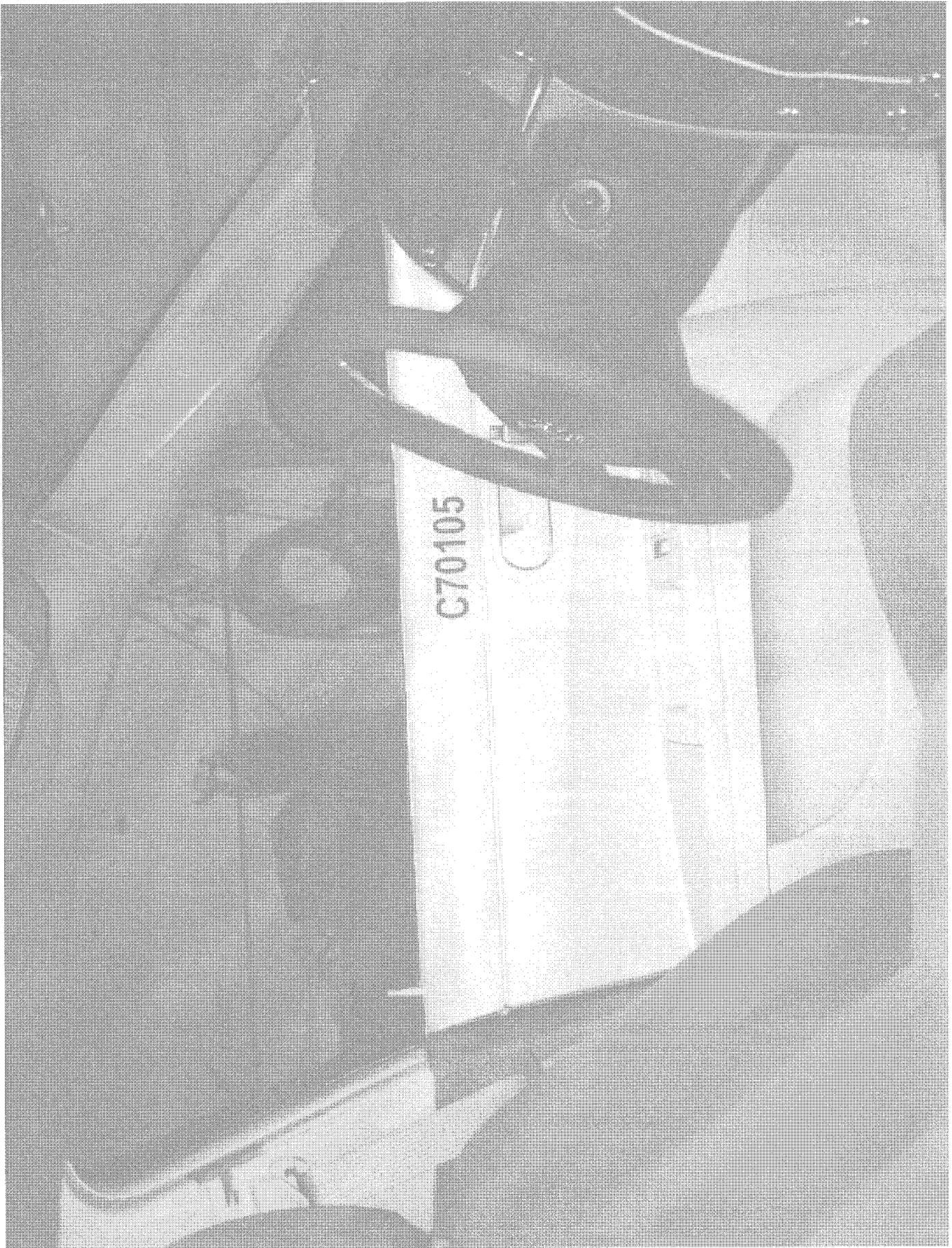


Figure A-33 PRE-TEST INTERIOR OF FRONT DOOR



Figure A-34 POST-TEST INTERIOR OF FRONT DOOR SHOWING SID IMPACT LOCATIONS

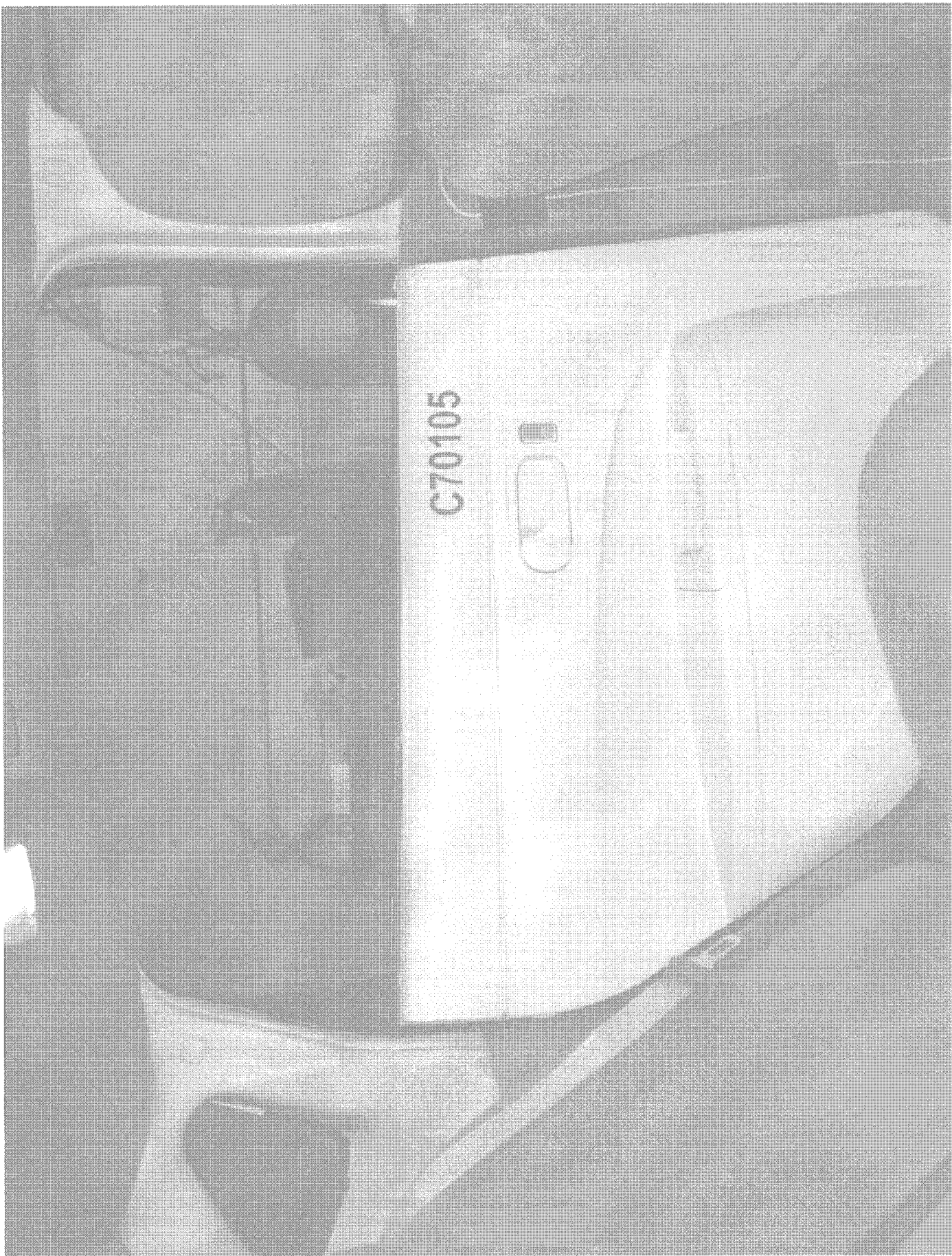


Figure A-35 PRE-TEST INTERIOR OF REAR DOOR



Figure A-36 POST-TEST INTERIOR OF REAR DOOR SHOWING SID IMPACT LOCATIONS

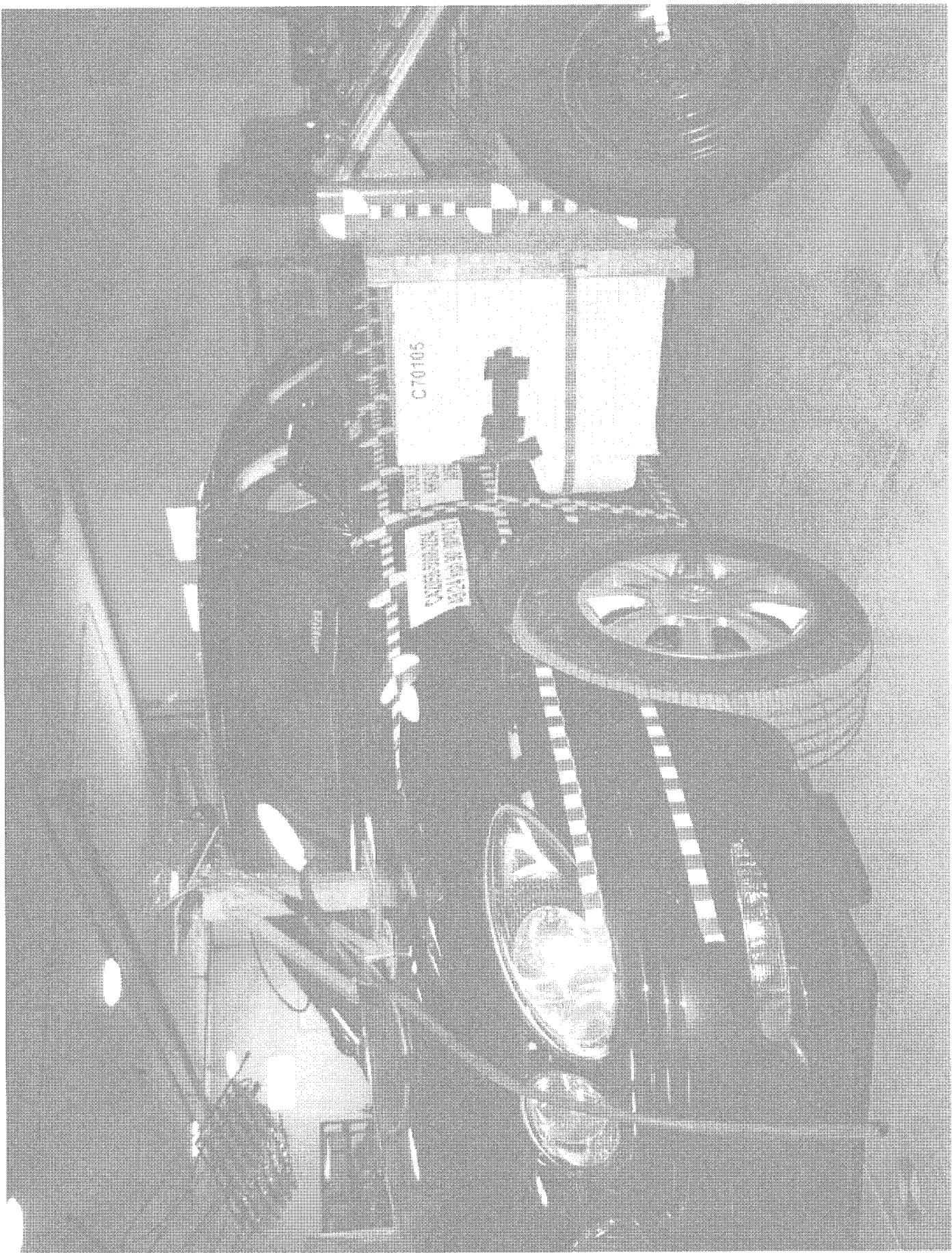


Figure A-37 PRE-TEST LEFT SIDE VIEW OF MDB WITH IMPACTOR FACE IN POSITION



Figure A-38 PRE-TEST RIGHT SIDE VIEW OF MDB WITH IMPACTOR FACE IN POSITION

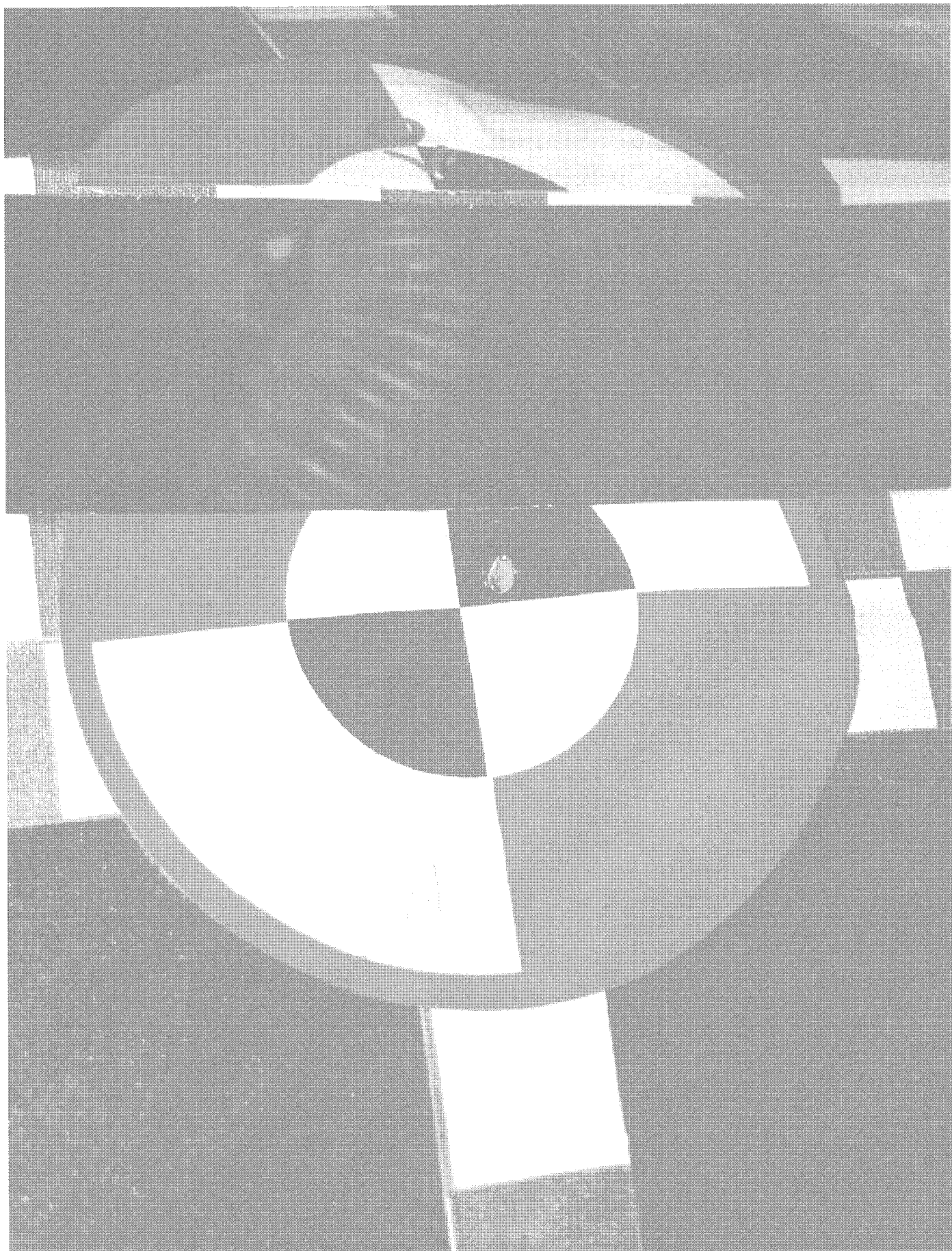


Figure A-39 POST-TEST CLOSE-UP VIEW OF IMPACT POINT TARGET

The GM logo, consisting of the letters "GM" in a bold, sans-serif font, with a horizontal line underneath the "M".

MFD BY GENERAL MOTORS OF CANADA LTD.

DATE
12/06

GVWR
2111 KG
4652 LB

GAWR FRT
1147 KG
2528 LB

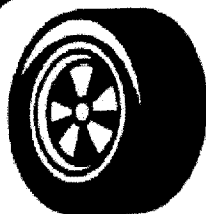
GAWR RR
964 KG
2124 LB

THIS VEHICLE CONFORMS TO ALL APPLICABLE U.S. FEDERAL MOTOR
VEHICLE SAFETY, BUMPER, AND THEFT PREVENTION STANDARDS IN
EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE.

2G4WC582371190990

TYPE: PASS CAR

Figure A-40 CLOSE-UP VIEW OF VEHICLE'S CERTIFICATION LABEL



TIRE AND LOADING INFORMATION

SEATING CAPACITY : TOTAL 6 : FRONT 3 : REAR 3

The combined weight of occupants and cargo should never exceed 484 kg or 1067 lbs.

TIRE	ORIGINAL SIZE	COLD TIRE PRESSURE	SEE OWNER'S
FRONT	P225/60R16 S	210 kPa (30 psi)	MANUAL FOR
REAR	P225/60R16 S	210 kPa	
SPARE	T125/70D16 M	65	

2G4WC582371

Figure A-41 CLOSE-UP VIEW OF VEHICLE'S TIRE PLACARD LABEL

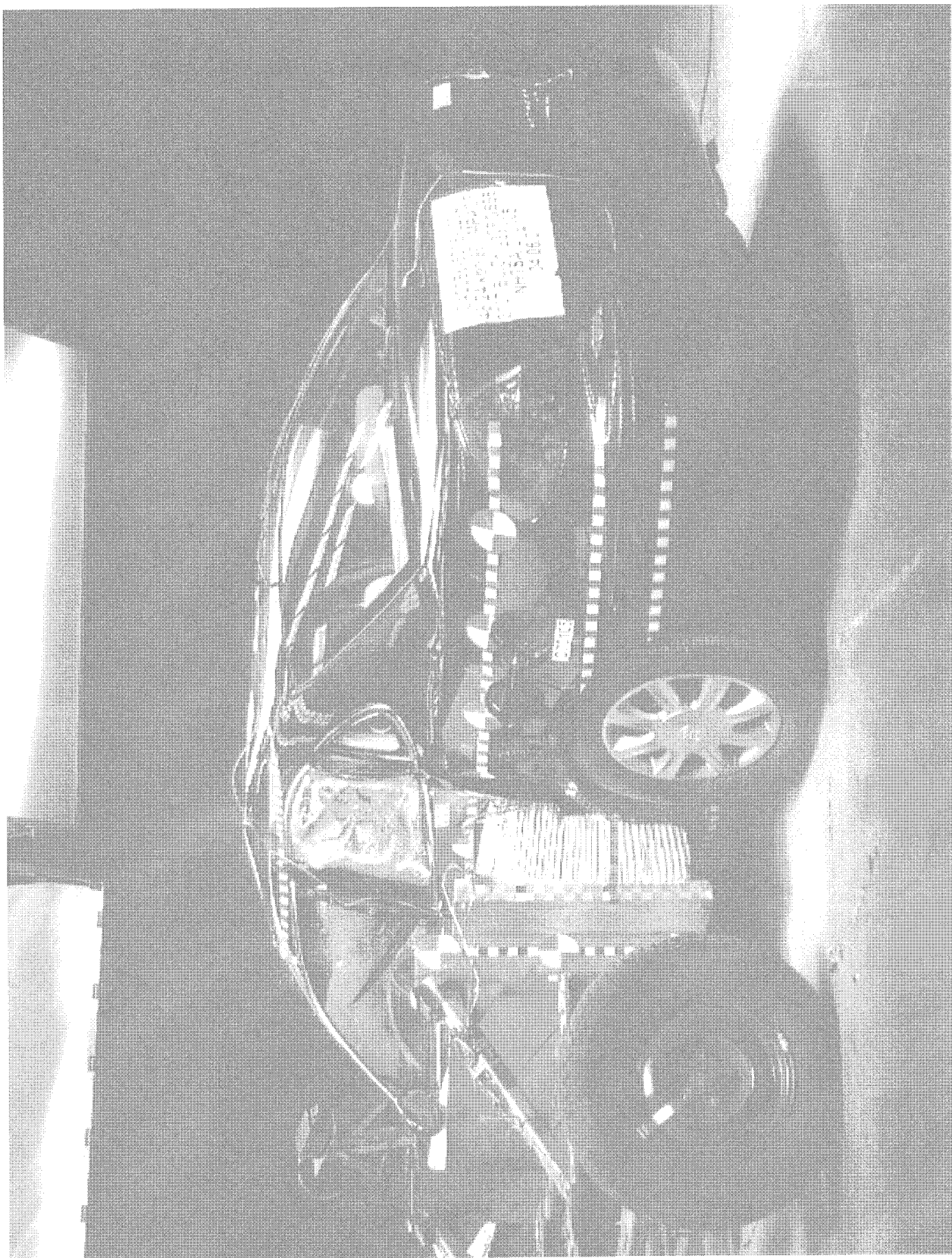


Figure A-42 IMPACT PHOTO

NOT APPLICABLE

Figure A-43 ROLLOVER 90 DEGREES

NOT APPLICABLE

Figure A-44 ROLLOVER 380 DEGREES

NOT APPLICABLE

Figure A-45 ROLLOVER 270 DEGREES

NOT APPLICABLE

Figure A-46 ROLLOVER 360 DEGREES

APPENDIX B

VEHICLE, MDB AND SID RESPONSE DATA

TABLE OF DATA PLOTS

DRIVER AND PASSENGER DUMMY INSTRUMENTATION PLOTS ACCELERATION DATA - FILTER CLASS 1000, LOWER SPINE - FILTER CLASS 180 INTEGRATION DATA - FILTER CLASS 180

<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
1	DRIVER HEAD (X) ACCELERATION VS TIME	B- 6
2	DRIVER HEAD (X) VELOCITY VS TIME	B- 7
3	DRIVER HEAD (Y) ACCELERATION VS TIME	B- 8
4	DRIVER HEAD (Y) VELOCITY VS TIME	B- 9
5	DRIVER HEAD (Z) ACCELERATION VS TIME	B- 10
6	DRIVER HEAD (Z) VELOCITY VS TIME	B- 11
7	DRIVER HEAD RESULTANT ACCELERATION VS TIME	B- 12
8	DRIVER UPPER RIB (Y) ACCELERATION VS TIME	B- 13
9	DRIVER UPPER RIB (Y) VELOCITY VS TIME	B- 14
10	DRIVER LOWER RIB (Y) ACCELERATION VS TIME	B- 15
11	DRIVER LOWER RIB (Y) VELOCITY VS TIME	B- 16
12	DRIVER LOWER SPINE (Y) ACCELERATION VS TIME	B- 17
13	DRIVER LOWER SPINE (Y) VELOCITY VS TIME	B- 18
14	DRIVER PELVIC (Y) ACCELERATION VS TIME	B- 19
15	DRIVER PELVIC (Y) VELOCITY VS TIME	B- 20
16	PASSENGER HEAD (X) ACCELERATION VS TIME	B- 21
17	PASSENGER HEAD (X) VELOCITY VS TIME	B- 22
18	PASSENGER HEAD (Y) ACCELERATION VS TIME	B- 23
19	PASSENGER HEAD (Y) VELOCITY VS TIME	B- 24
20	PASSENGER HEAD (Z) ACCELERATION VS TIME	B- 25
21	PASSENGER HEAD (Z) VELOCITY VS TIME	B- 26
22	PASSENGER HEAD RESULTANT ACCELERATION VS TIME	B- 27
23	PASSENGER UPPER RIB (Y) ACCELERATION VS TIME	B- 28
24	PASSENGER UPPER RIB (Y) VELOCITY VS TIME	B- 29
25	PASSENGER LOWER RIB (Y) ACCELERATION VS TIME	B- 30
26	PASSENGER LOWER RIB (Y) VELOCITY VS TIME	B- 31
27	PASSENGER LOWER SPINE (Y) ACCELERATION VS TIME	B- 32
28	PASSENGER LOWER SPINE (Y) VELOCITY VS TIME	B- 33
29	PASSENGER PELVIC (Y) ACCELERATION VS TIME	B- 34
30	PASSENGER PELVIC (Y) VELOCITY VS TIME	B- 35

DRIVER & PASSENGER DUMMY INSTRUMENTATION PLOTS ACCELERATION DATA - FIR FILTERED

<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
31	DRIVER UPPER RIB (Y) ACCELERATION VS TIME	B- 36
32	DRIVER LOWER RIB (Y) ACCELERATION VS TIME	B- 37
33	DRIVER LOWER SPINE (Y) ACCELERATION VS TIME	B- 38
34	DRIVER PELVIC (Y) ACCELERATION VS TIME	B- 39
35	PASSENGER UPPER RIB (Y) ACCELERATION VS TIME	B- 40
36	PASSENGER LOWER RIB (Y) ACCELERATION VS TIME	B- 41
37	PASSENGER LOWER SPINE (Y) ACCELERATION VS TIME	B- 42
38	PASSENGER PELVIC (Y) ACCELERATION VS TIME	B- 43

TEST VEHICLE INSTRUMENTATION PLOTS
ACCELERATION DATA - FILTER CLASS 60
INTEGRATION DATA - FILTER CLASS 180

<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
39	RIGHT SIDE SILL AT FRONT SEAT (X) ACCELERATION VS TIME	B- 44
40	RIGHT SIDE SILL AT FRONT SEAT (X) VELOCITY VS TIME	B- 45
41	RIGHT SIDE SILL AT FRONT SEAT (Y) ACCELERATION VS TIME	B- 46
42	RIGHT SIDE SILL AT FRONT SEAT (Y) VELOCITY VS TIME	B- 47
43	RIGHT SIDE SILL AT FRONT SEAT (Z) ACCELERATION VS TIME	B- 48
44	RIGHT SIDE SILL AT FRONT SEAT (Z) VELOCITY VS TIME	B- 49
45	RIGHT SIDE SILL AT FRONT SEAT RESULTANT ACCELERATION VS TIME	B- 50
46	RIGHT SIDE SILL AT REAR SEAT (X) ACCELERATION VS TIME	B- 51
47	RIGHT SIDE SILL AT REAR SEAT (X) VELOCITY VS TIME	B- 52
48	RIGHT SIDE SILL AT REAR SEAT (Y) ACCELERATION VS TIME	B- 53
49	RIGHT SIDE SILL AT REAR SEAT (Y) VELOCITY VS TIME	B- 54
50	RIGHT SIDE SILL AT REAR SEAT (Z) ACCELERATION VS TIME	B- 55
51	RIGHT SIDE SILL AT REAR SEAT (Z) VELOCITY VS TIME	B- 56
52	RIGHT SIDE SILL AT REAR SEAT RESULTANT ACCELERATION VS TIME	B- 57
53	REAR FLOORPAN ABOVE AXLE (X) ACCELERATION VS TIME	B- 58
54	REAR FLOORPAN ABOVE AXLE (X) VELOCITY VS TIME	B- 59
55	REAR FLOORPAN ABOVE AXLE (Y) ACCELERATION VS TIME	B- 60
56	REAR FLOORPAN ABOVE AXLE (Y) VELOCITY VS TIME	B- 61
57	REAR FLOORPAN ABOVE AXLE (Z) ACCELERATION VS TIME	B- 62
58	REAR FLOORPAN ABOVE AXLE (Z) VELOCITY VS TIME	B- 63
59	REAR FLOORPAN ABOVE AXLE RESULTANT ACCELERATION VS TIME	B- 64
60	LEFT SIDE SILL AT REAR SEAT (Y) ACCELERATION VS TIME	B- 65
61	LEFT SIDE SILL AT REAR SEAT (Y) VELOCITY VS TIME	B- 66
62	LEFT SIDE SILL AT FRONT SEAT (Y) ACCELERATION VS TIME	B- 67
63	LEFT SIDE SILL AT FRONT SEAT (Y) VELOCITY VS TIME	B- 68
64	RIGHT REAR OCCUPANT COMPARTMENT (Y) ACCELERATION VS TIME	B- 69
65	RIGHT REAR OCCUPANT COMPARTMENT (Y) VELOCITY VS TIME	B- 70
66	LOWER B-POST (Y) ACCELERATION VS TIME	B- 71
67	LOWER B-POST (Y) VELOCITY VS TIME	B- 72
68	MIDDLE B-POST (Y) ACCELERATION VS TIME	B- 73
69	MIDDLE B-POST (Y) VELOCITY VS TIME	B- 74
70	LOWER A-POST (Y) ACCELERATION VS TIME	B- 75
71	LOWER A-POST (Y) VELOCITY VS TIME	B- 76
72	MIDDLE A-POST (Y) ACCELERATION VS TIME	B- 77
73	MIDDLE A-POST (Y) VELOCITY VS TIME	B- 78
74	FRONT SEAT TRACK (Y) ACCELERATION VS TIME	B- 79
75	FRONT SEAT TRACK (Y) VELOCITY VS TIME	B- 80
76	REAR SEAT TRACK (Y) ACCELERATION VS TIME	B- 81
77	REAR SEAT TRACK (Y) VELOCITY VS TIME	B- 82

TEST VEHICLE INSTRUMENTATION PLOTS
ACCELERATION DATA - FILTER CLASS 60
INTEGRATION DATA - FILTER CLASS 180

<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
78	VEHICLE CENTER OF GRAVITY (X) ACCELERATION VS TIME	B- 83
79	VEHICLE CENTER OF GRAVITY (X) VELOCITY VS TIME	B- 84
80	VEHICLE CENTER OF GRAVITY (Y) ACCELERATION VS TIME	B- 85
81	VEHICLE CENTER OF GRAVITY (Y) VELOCITY ACCELERATION VS TIME	B- 86
82	VEHICLE CENTER OF GRAVITY (Z) ACCELERATION VS TIME	B- 87
83	VEHICLE CENTER OF GRAVITY (Z) VELOCITY VS TIME	B- 88
84	VEHICLE CENTER OF GRAVITY RESULTANT ACCELERATION VS TIME	B- 89

MDB INSTRUMENTATION PLOTS
ACCELERATION DATA - FILTER CLASS 60
INTEGRATION DATA - FILTER CLASS 180

<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
85	MDB CENTER OF GRAVITY (X) ACCELERATION VS TIME	B- 90
86	MDB CENTER OF GRAVITY (X) VELOCITY VS TIME	B- 91
87	MDB CENTER OF GRAVITY (Y) ACCELERATION VS TIME	B- 92
88	MDB CENTER OF GRAVITY (Y) VELOCITY VS TIME	B- 93
89	MDB CENTER OF GRAVITY (Z) ACCELERATION VS TIME	B- 94
90	MDB CENTER OF GRAVITY (Z) VELOCITY VS TIME	B- 95
91	MDB CENTER OF GRAVITY RESULTANT ACCELERATION VS TIME	B- 96
92	MDB REAR (X) ACCELERATION VS TIME	B- 97
93	MDB REAR (X) VELOCITY VS TIME	B- 98
94	MDB REAR (Y) ACCELERATION VS TIME	B- 99
95	MDB REAR (Y) VELOCITY VS TIME	B- 100

DRIVER & PASSENGER DUMMY INSTRUMENTATION PLOTS (REDUNDANT)
ACCELERATION DATA - FILTER CLASS 1000, LOWER SPINE - FILTER CLASS 180
INTEGRATION DATA - FILTER CLASS 180

<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
96	DRIVER UPPER RIB (Y) ACCELERATION VS TIME	B- 101
97	DRIVER UPPER RIB (Y) VELOCITY VS TIME	B- 102
98	DRIVER LOWER RIB (Y) ACCELERATION VS TIME	B- 103
99	DRIVER LOWER RIB (Y) VELOCITY VS TIME	B- 104
100	DRIVER LOWER SPINE (Y) ACCELERATION VS TIME	B- 105
101	DRIVER LOWER SPINE (Y) VELOCITY VS TIME	B- 106
102	DRIVER PELVIC (Y) ACCELERATION VS TIME	B- 107
103	DRIVER PELVIC (Y) VELOCITY VS TIME	B- 108
104	PASSENGER UPPER RIB (Y) ACCELERATION VS TIME	B- 109
105	PASSENGER UPPER RIB (Y) VELOCITY VS TIME	B- 110
106	PASSENGER LOWER RIB (Y) ACCELERATION VS TIME	B- 111
107	PASSENGER LOWER RIB (Y) VELOCITY VS TIME	B- 112
108	PASSENGER LOWER SPINE (Y) ACCELERATION VS TIME	B- 113
109	PASSENGER LOWER SPINE (Y) VELOCITY VS TIME	B- 114
110	PASSENGER PELVIC (Y) ACCELERATION VS TIME	B- 115
111	PASSENGER PELVIC (Y) VELOCITY VS TIME	B- 116

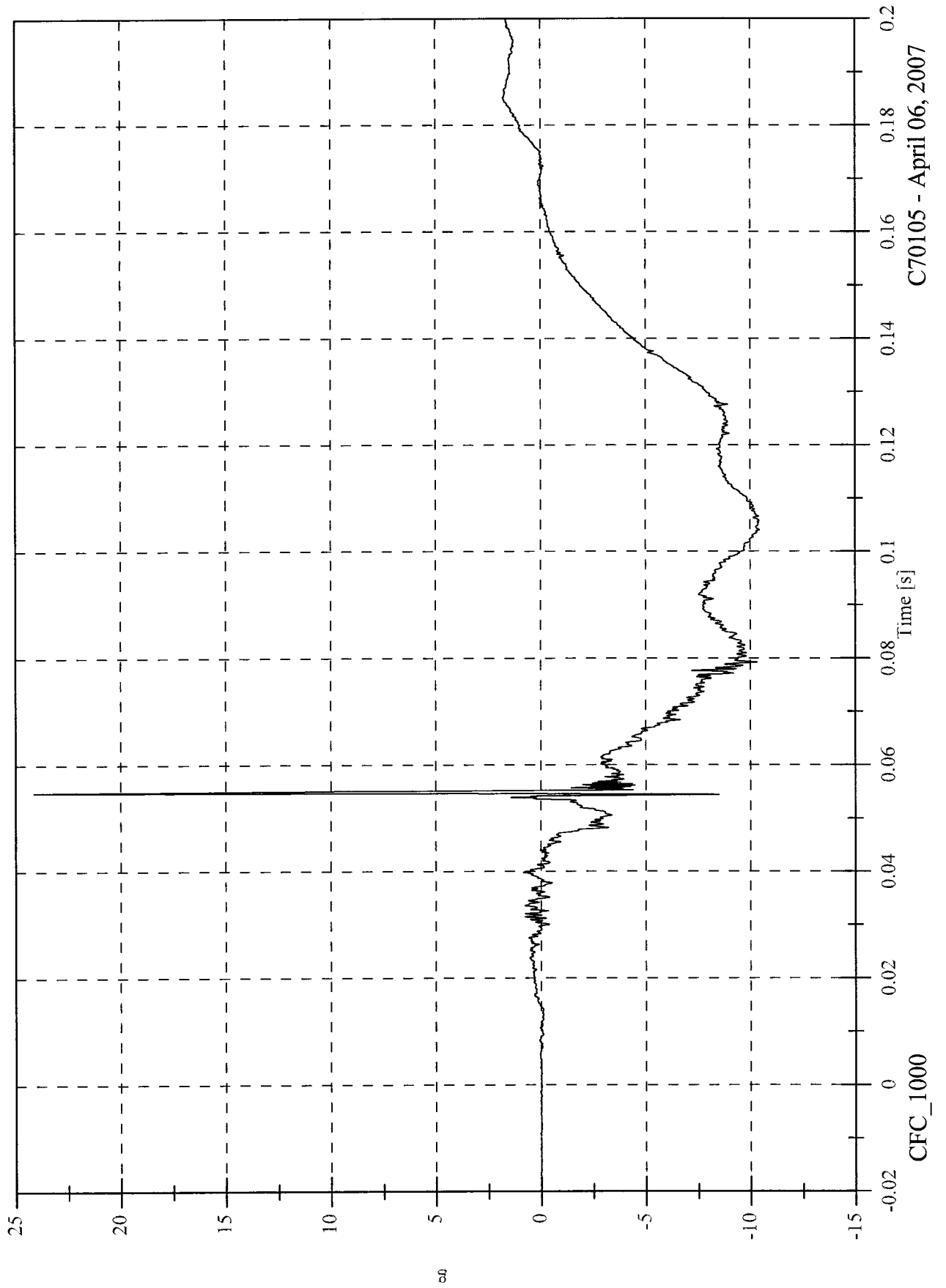
DRIVER & PASSENGER DUMMY INSTRUMENTATION PLOTS (REDUNDANT)
ACCELERATION DATA - FIR FILTERED

<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
112	DRIVER UPPER RIB (Y) ACCELERATION VS TIME	B- 117
113	DRIVER LOWER RIB (Y) ACCELERATION VS TIME	B- 118
114	DRIVER LOWER SPINE (Y) ACCELERATION VS TIME	B- 119
115	DRIVER PELVIC (Y) ACCELERATION VS TIME	B- 120
116	PASSENGER UPPER RIB (Y) ACCELERATION VS TIME	B- 121
117	PASSENGER LOWER RIB (Y) ACCELERATION VS TIME	B- 122
118	PASSENGER LOWER SPINE (Y) ACCELERATION VS TIME	B- 123
119	PASSENGER PELVIC (Y) ACCELERATION VS TIME	B- 124

2007 214D Test 8 2007 Buick Lacrosse

Max: 24.1 [g] at 0.055 [s]
Min: -10.4 [g] at 0.104 [s]

V2P1 Head x

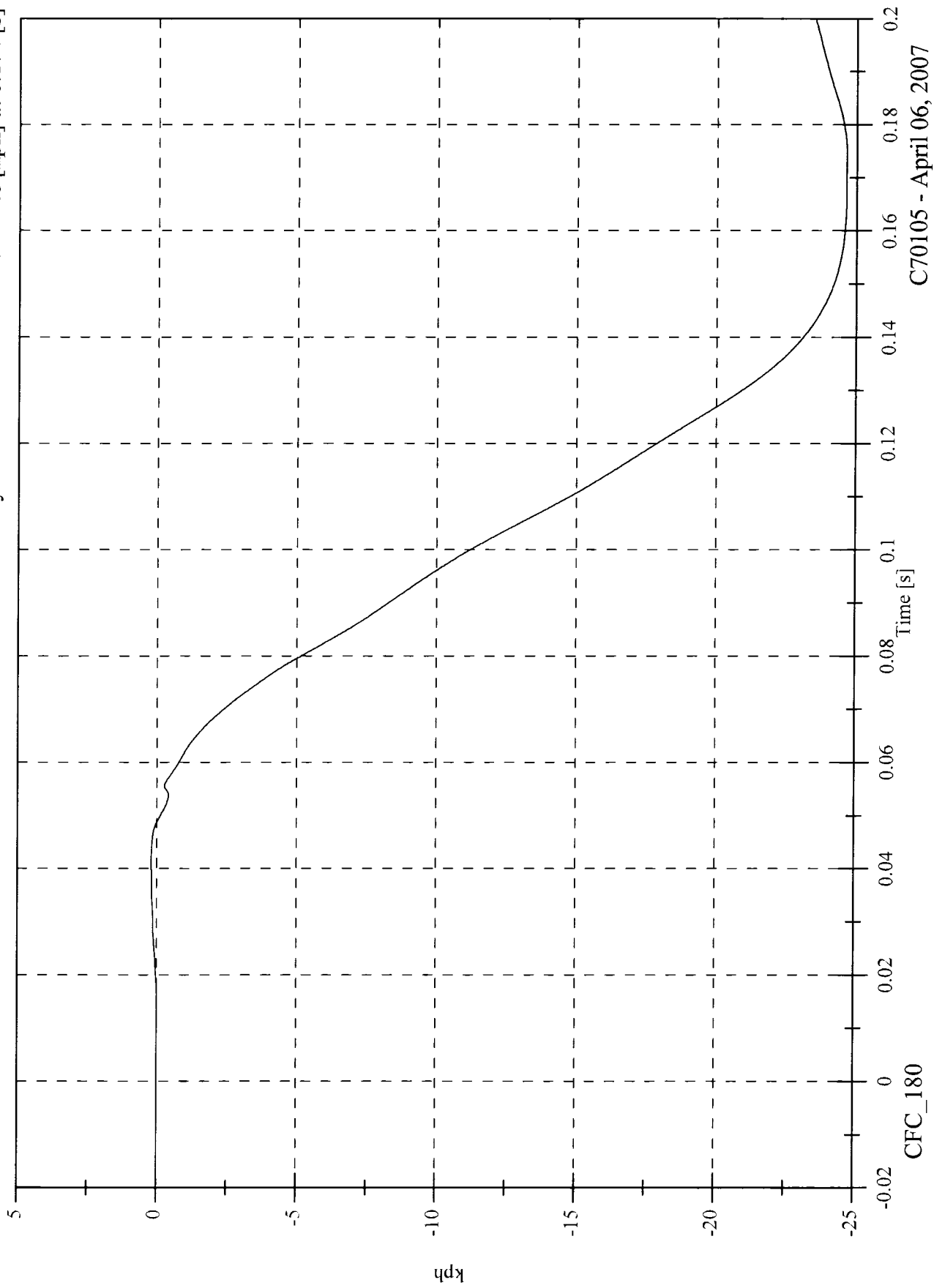


C70105 - April 06, 2007

2007 214D Test 8 2007 Buick Lacrosse

Max: 0.2 [kph] at 0.041 [s]
Min: -24.6 [kph] at 0.174 [s]

V2P1 Head x Velocity

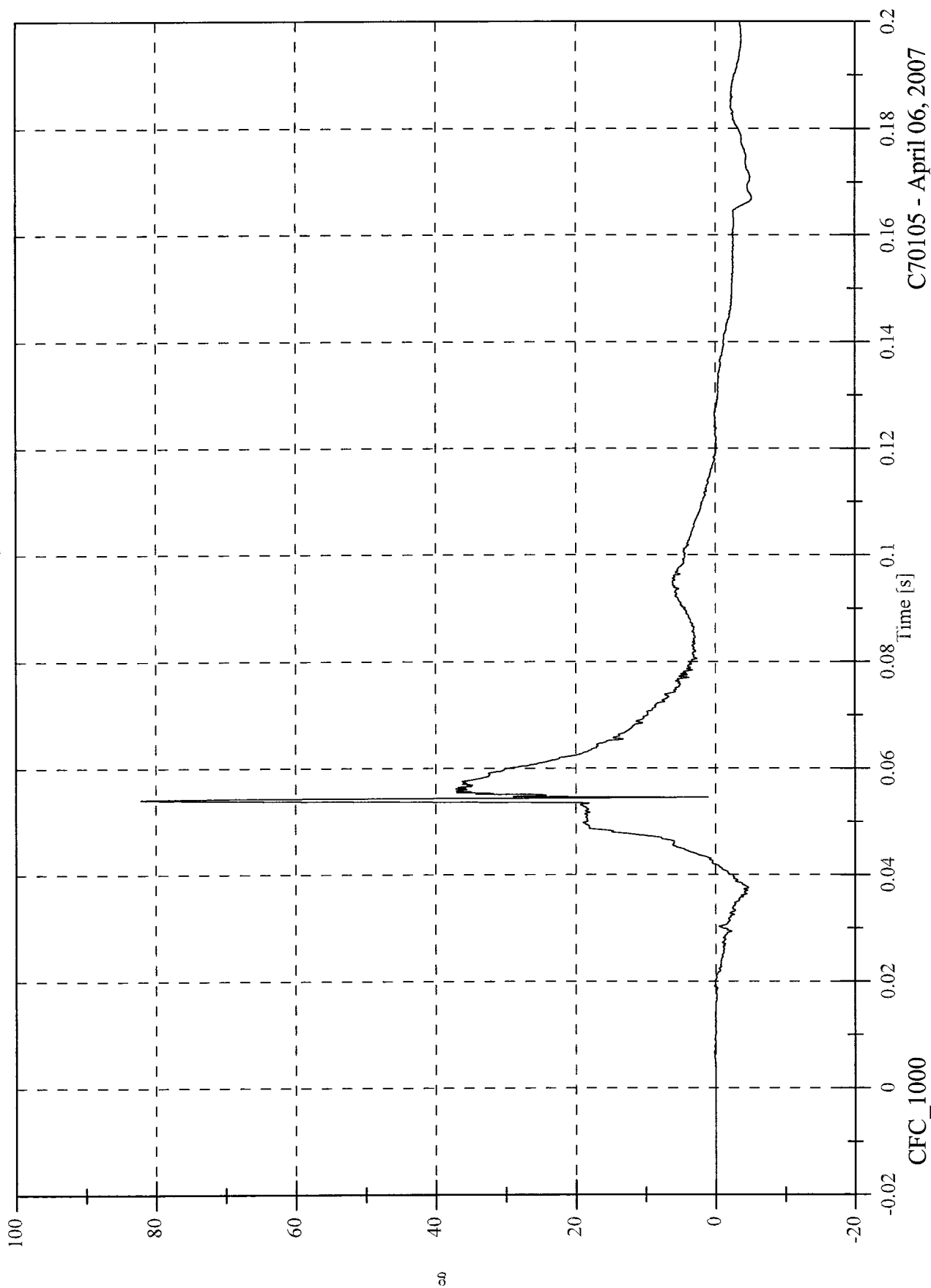


C70105 - April 06, 2007

2007 214D Test 8 2007 Buick Lacrosse

Max: 82.1 [g] at 0.054 [s]
Min: -5.2 [g] at 0.167 [s]

V2P1 Head y

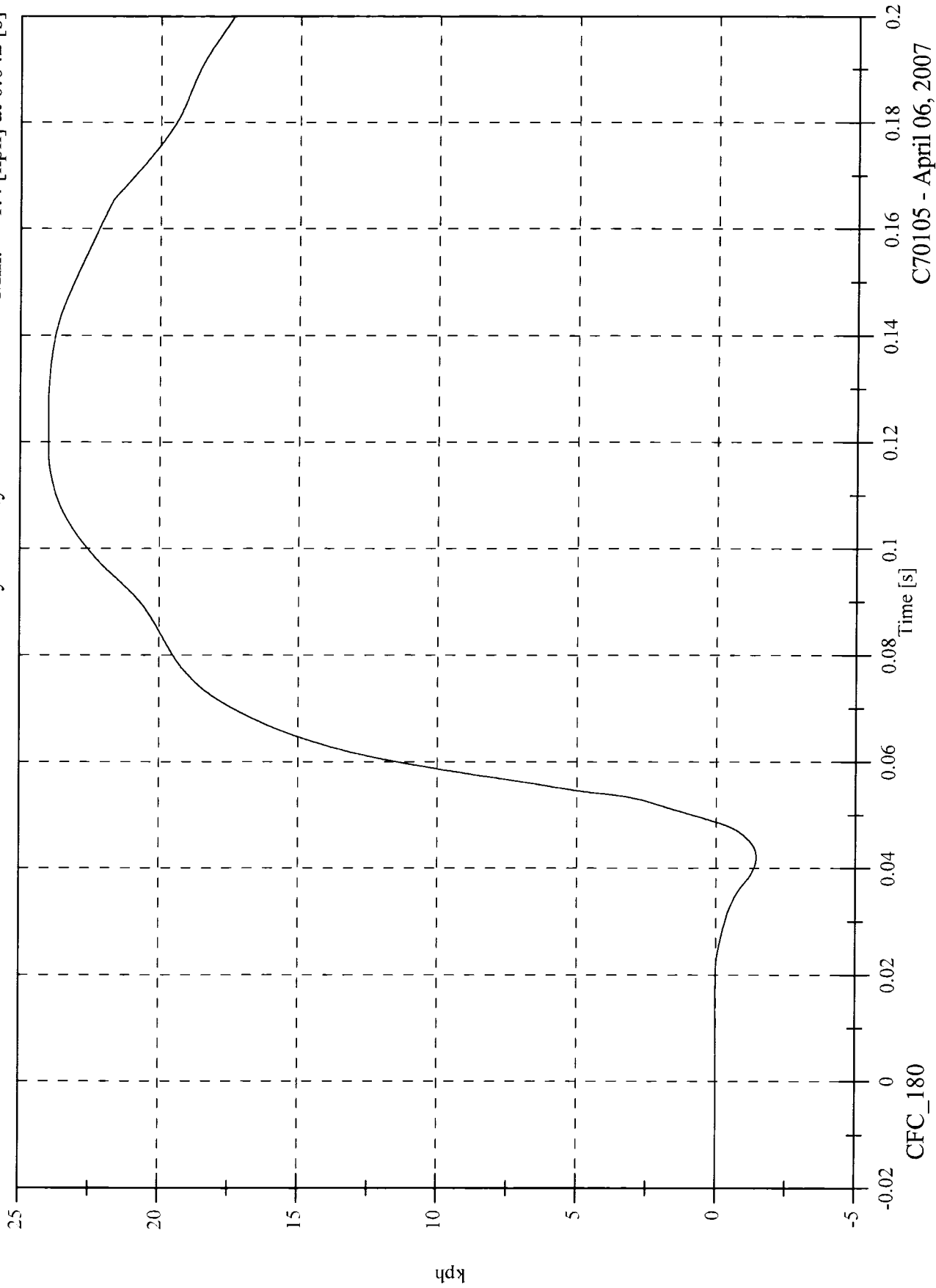


C70105 - April 06, 2007

2007 214D Test 8 2007 Buick Lacrosse

V2P1 Head y Velocity

Max: 24.0 [kph] at 0.127 [s]
Min: -1.4 [kph] at 0.042 [s]

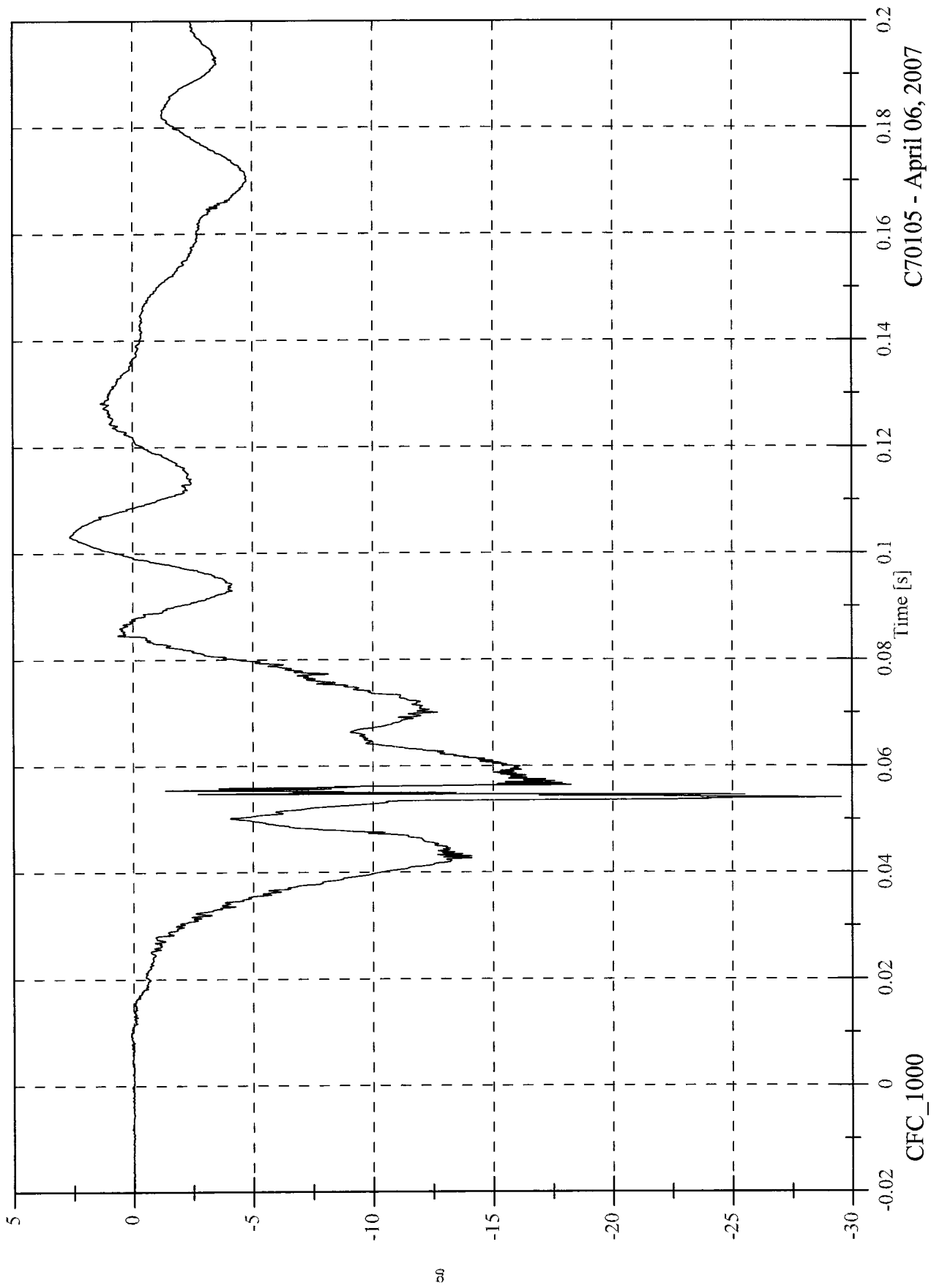


C70105 - April 06, 2007

2007 214D Test 8 2007 Buick Lacrosse

Max: 2.6 [g] at 0.103 [s]
Min: -29.5 [g] at 0.054 [s]

V2P1 Head z

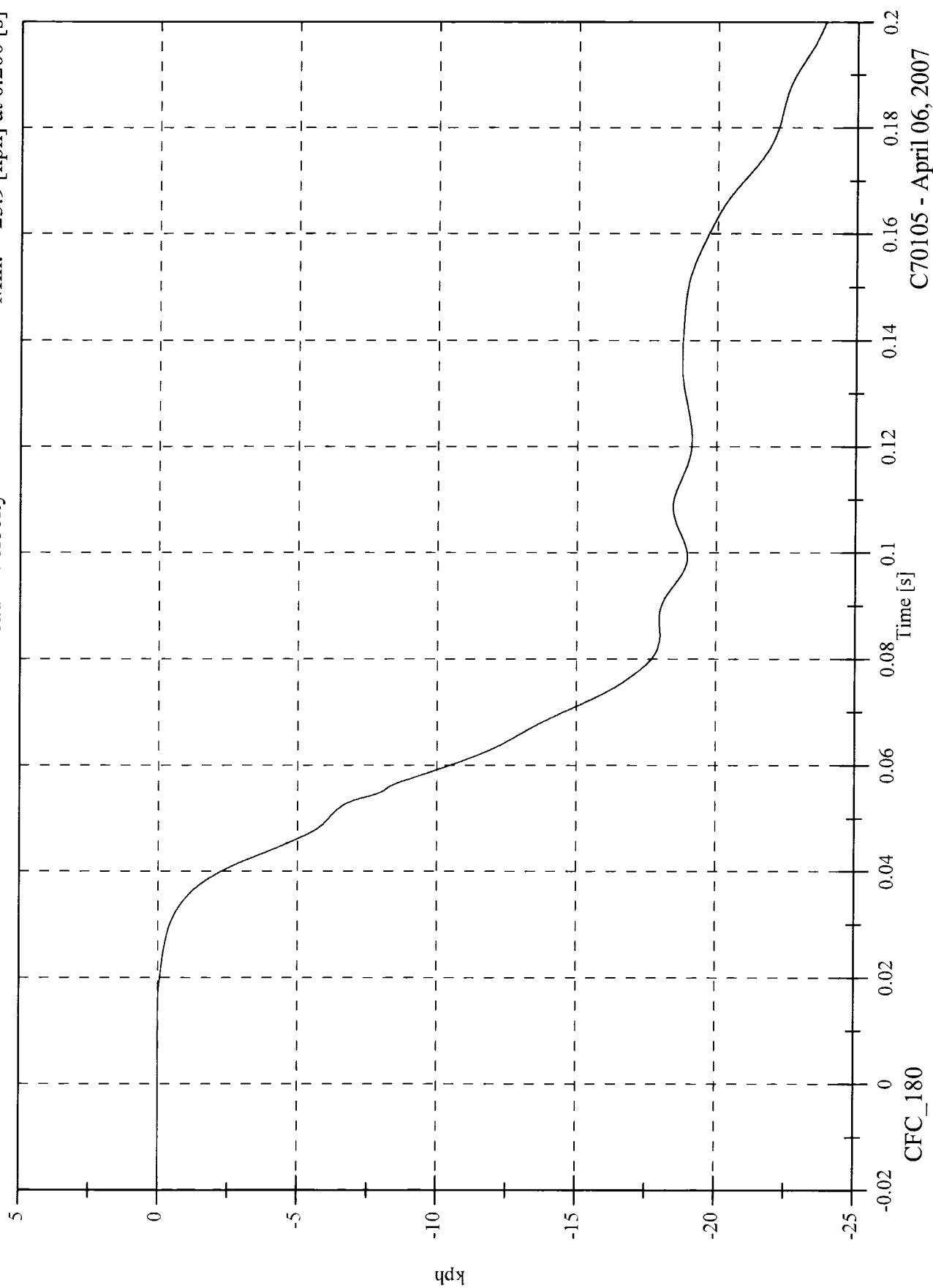


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Max: 0.0 [kph] at 0.011 [s]
Min: -23.9 [kph] at 0.200 [s]

V2P1 Head z Velocity

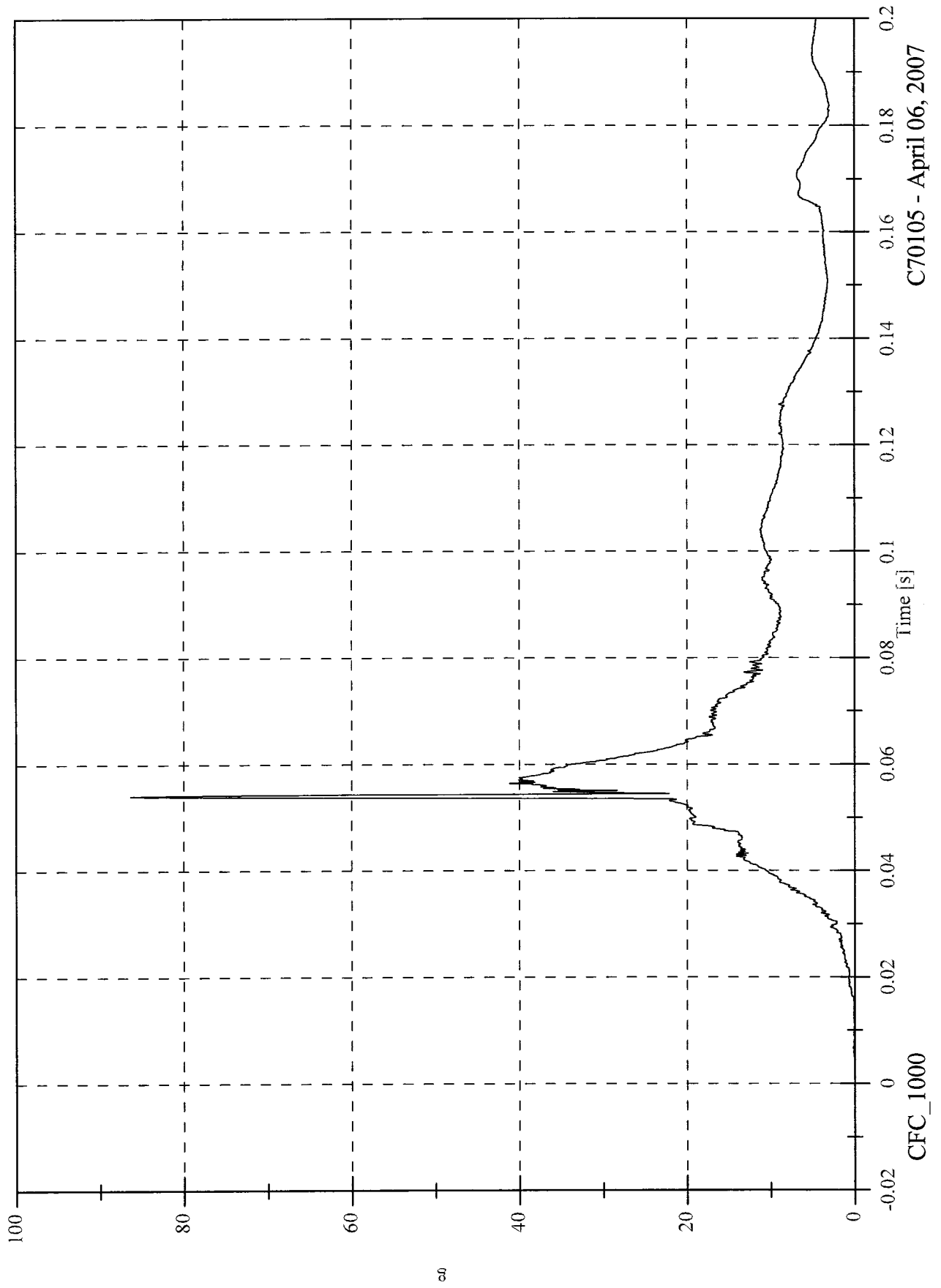


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Max: 86.4 [g] at 0.054 [s]
Min: 0.0 [g] at -0.013 [s]

V2P1 Head Resultant

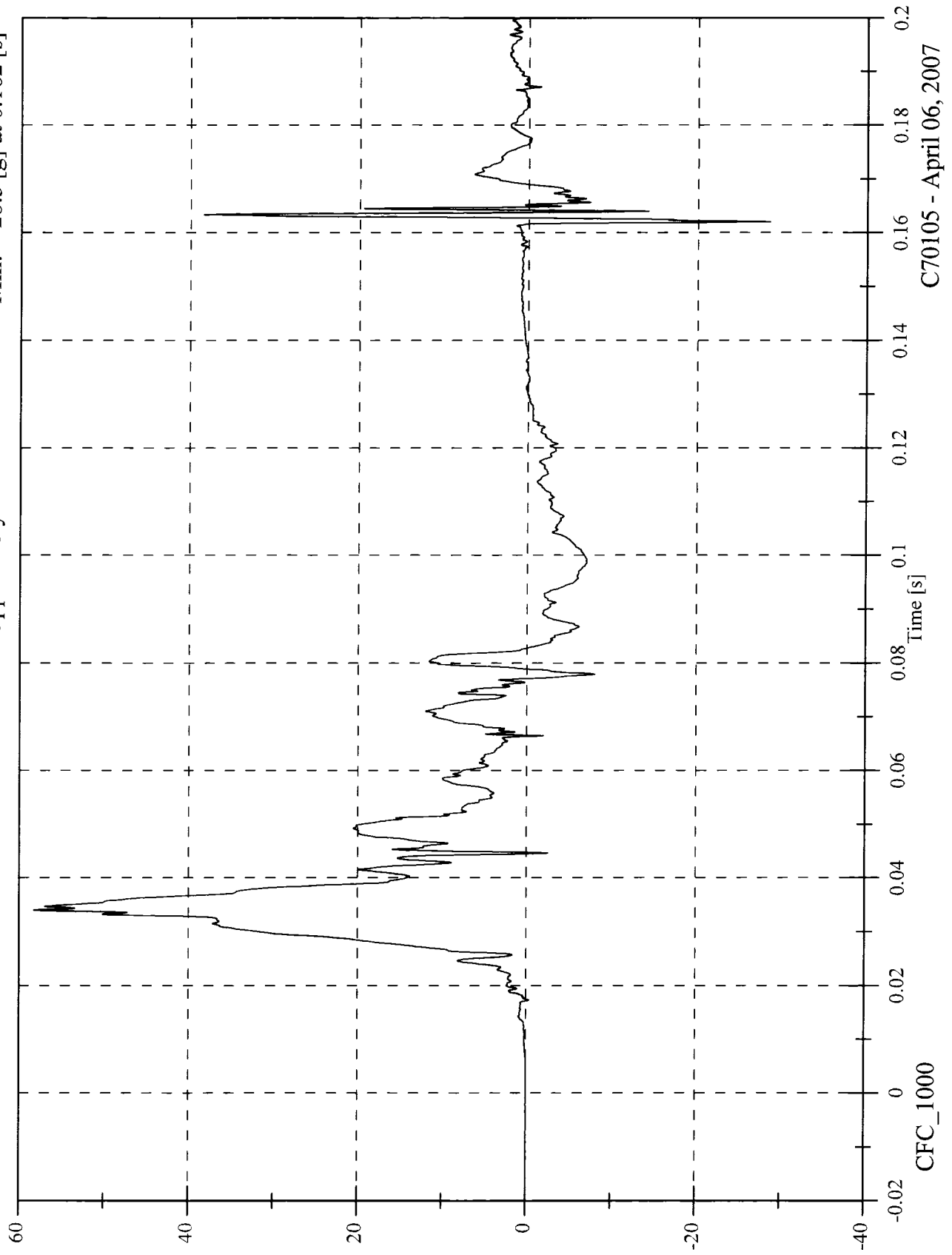


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V2P1 Upper Rib y

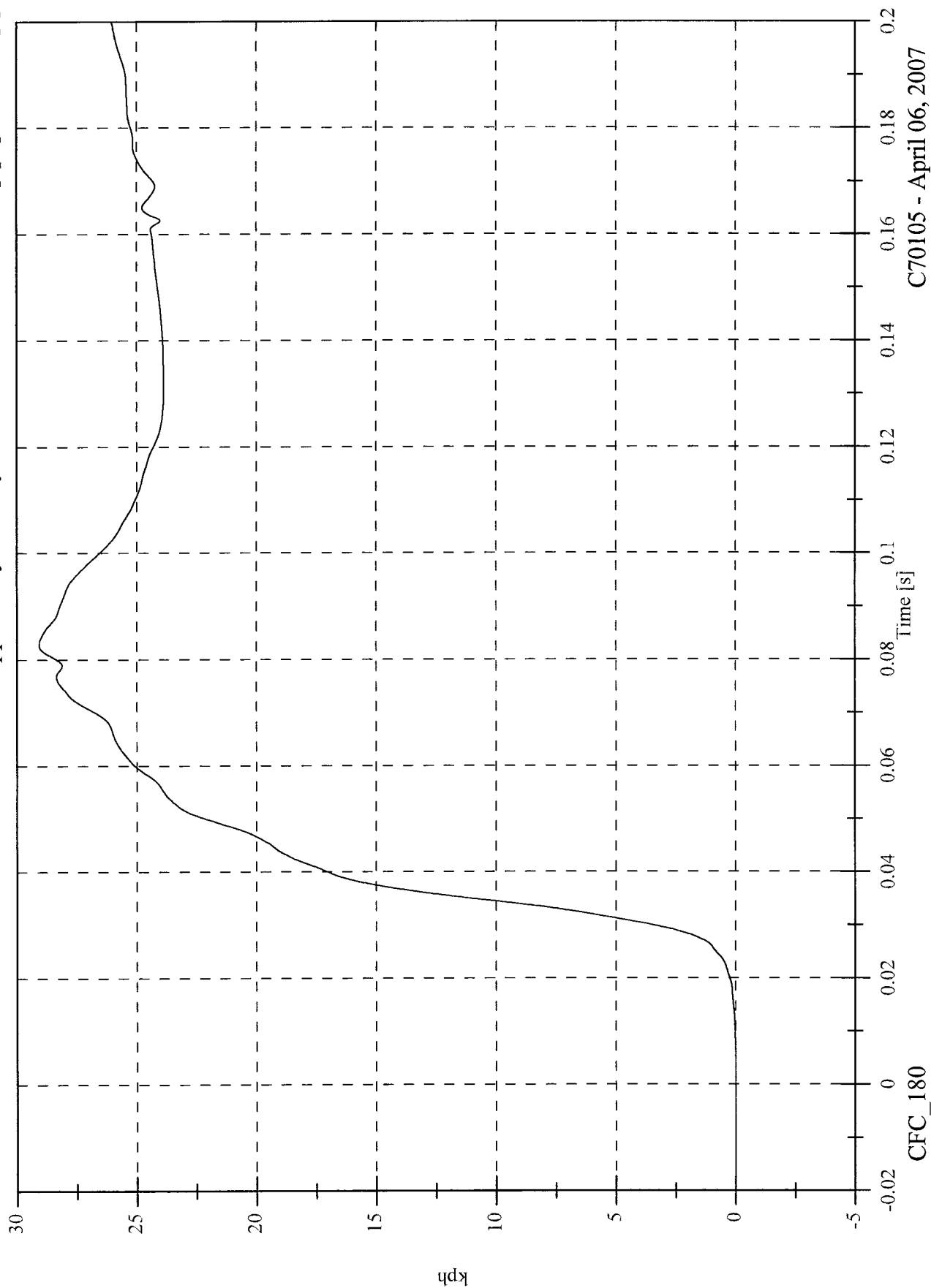
Max: 58.3 [g] at 0.034 [s]
Min: -28.5 [g] at 0.162 [s]



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Max: 29.1 [kph] at 0.083 [s]
 Min: -0.0 [kph] at -0.017 [s]

V2P1 Upper Rib y Velocity

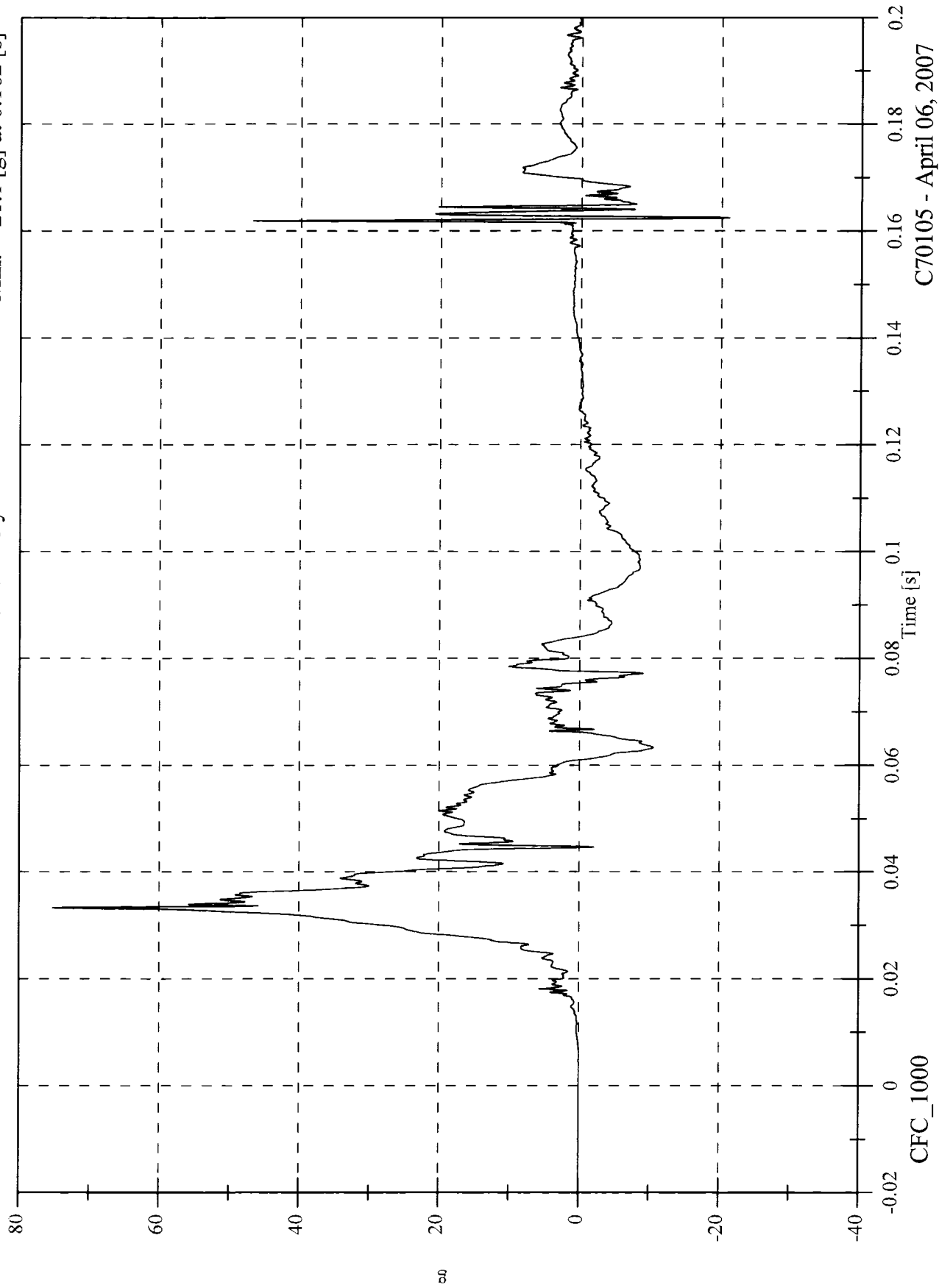


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V2P1 Lower Rib y

Max: 75.3 [g] at 0.033 [s]
Min: -21.1 [g] at 0.162 [s]

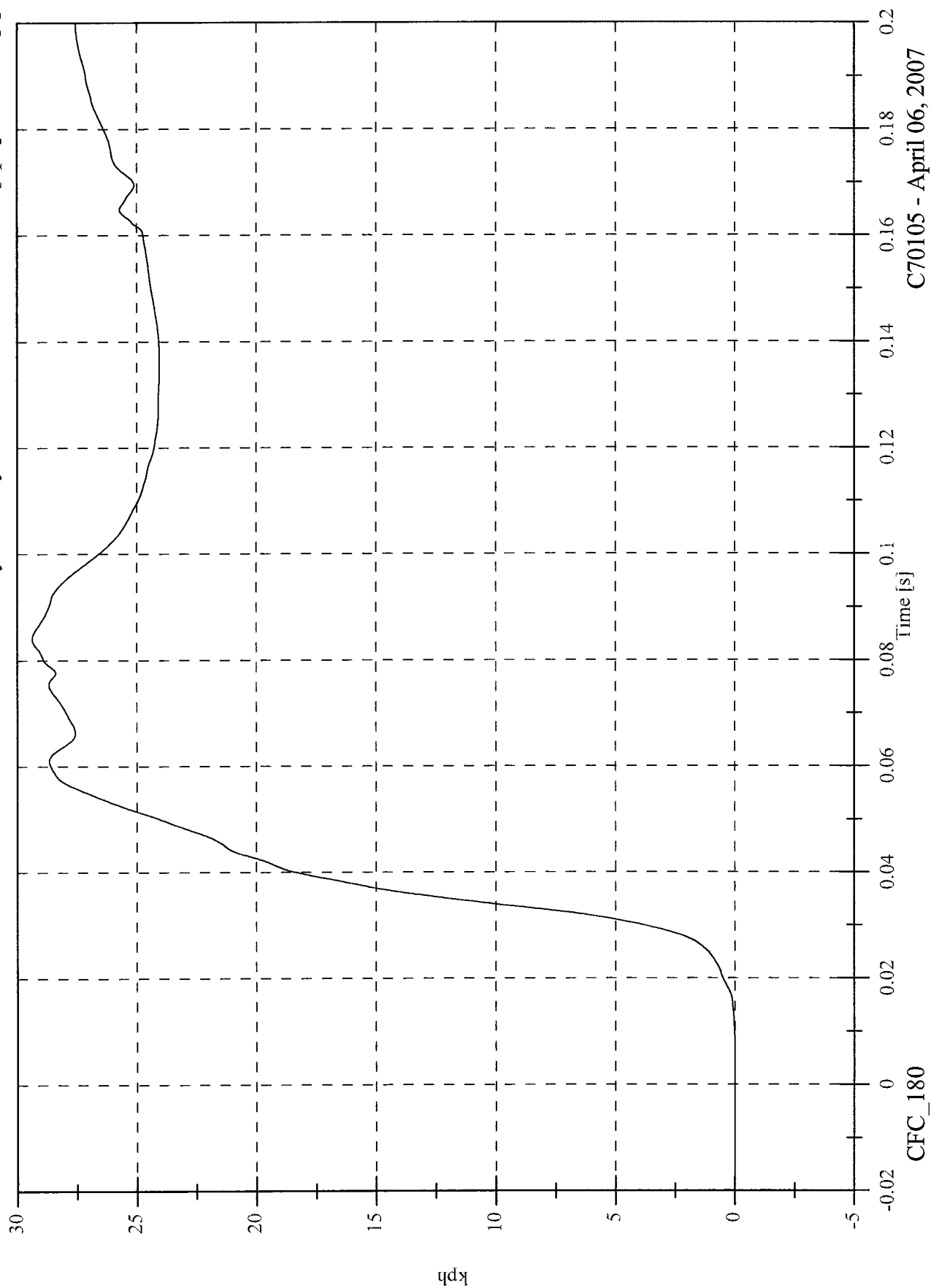


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Max: 29.4 [kph] at 0.084 [s]
Min: -0.0 [kph] at -0.018 [s]

V2P1 Lower Rib y Velocity

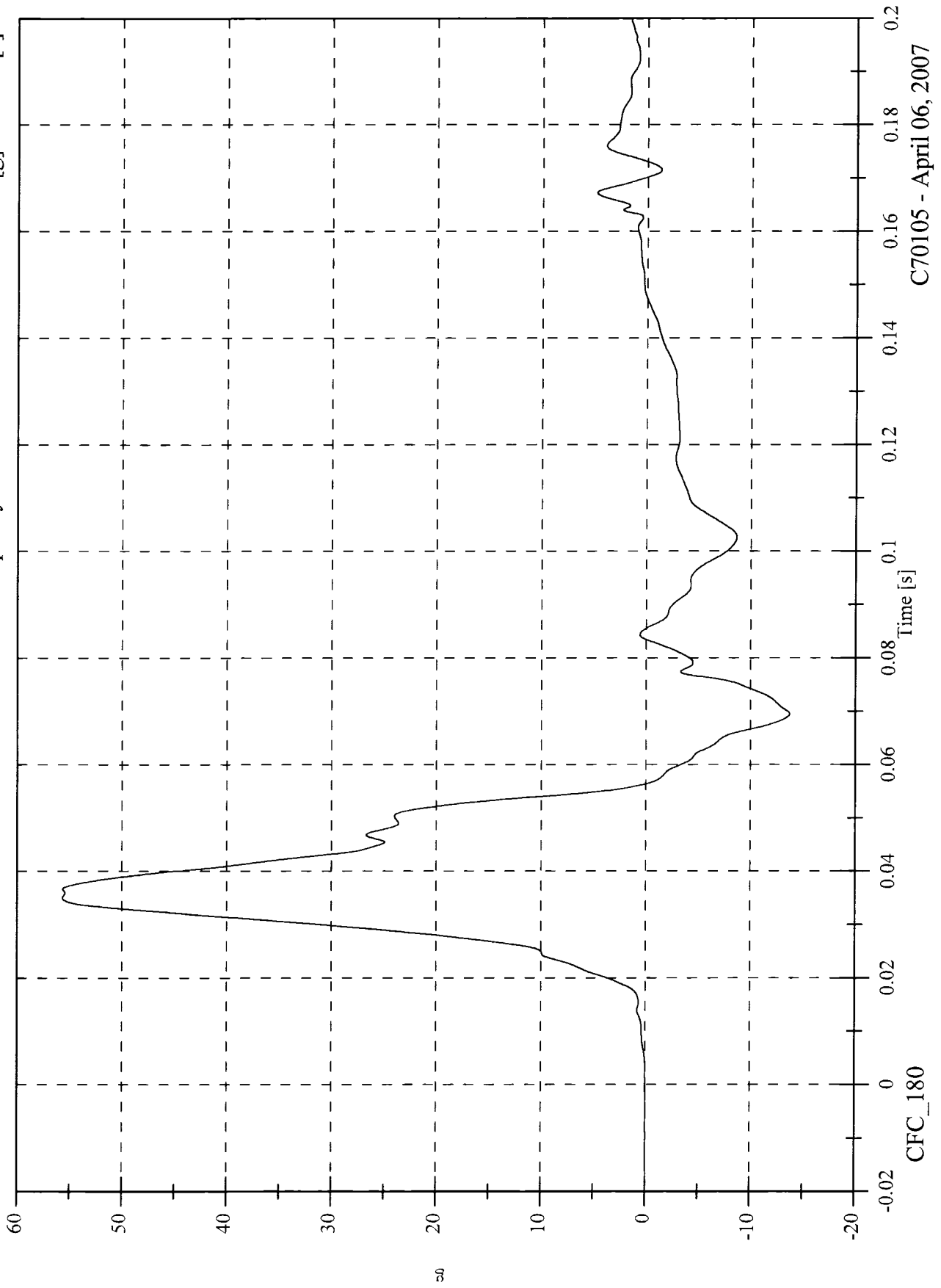


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V2P1 Lower Spine y

Max: 55.7 [g] at 0.035 [s]
Min: -13.7 [g] at 0.069 [s]



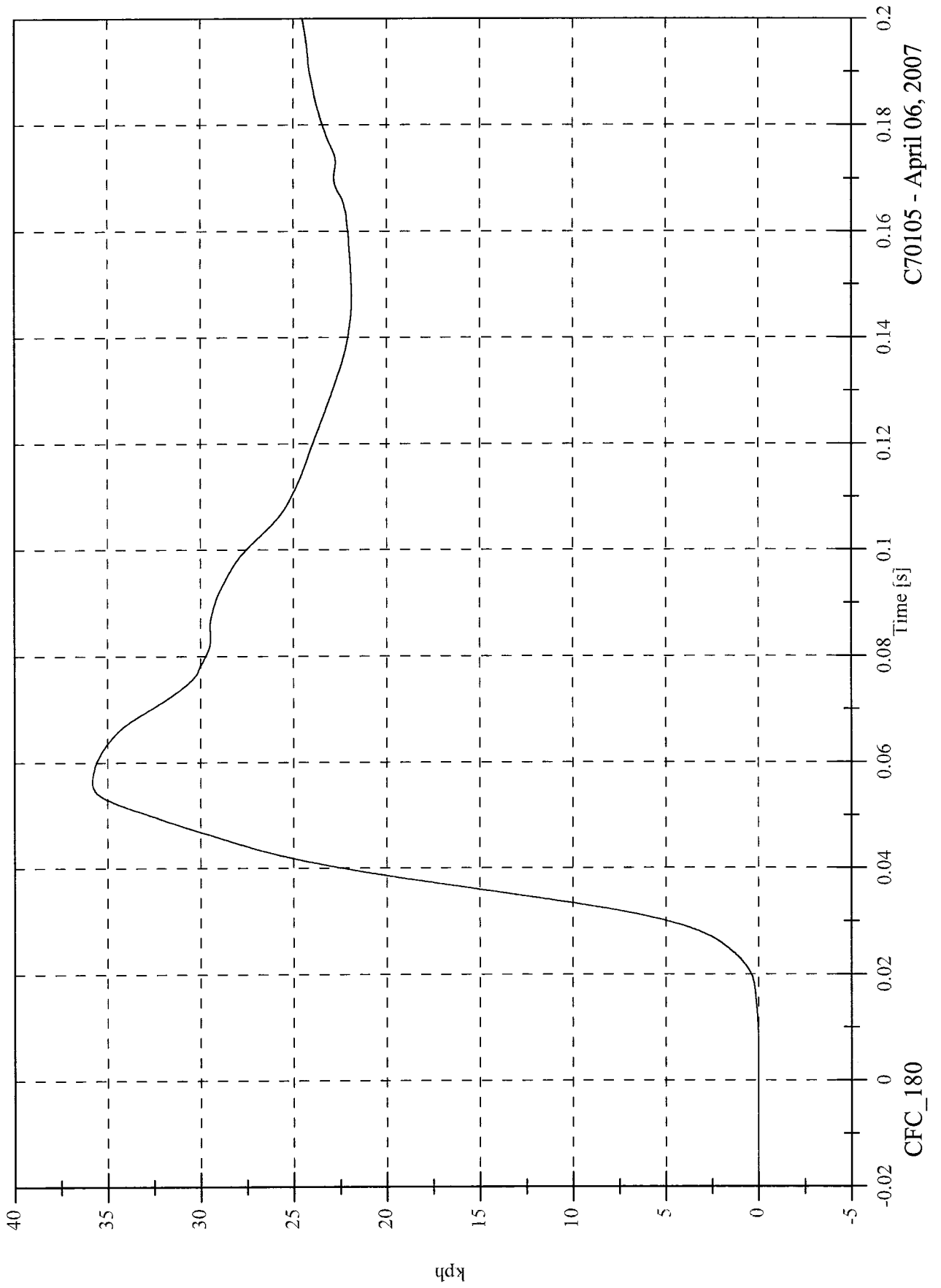
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Max: 35.8 [kph] at 0.056 [s]

Min: -0.0 [kph] at -0.002 [s]

V2P1 Lower Spine y Velocity

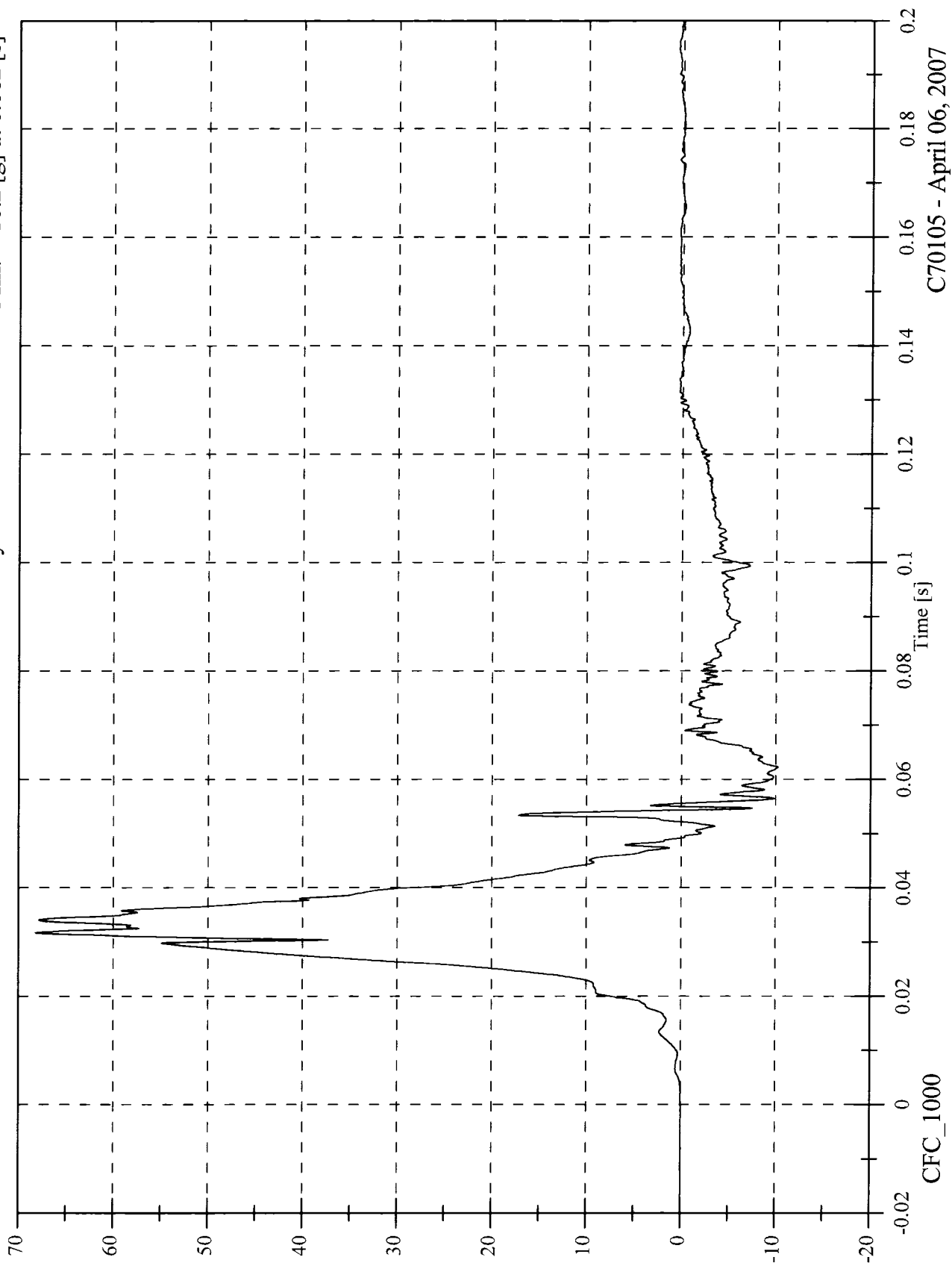


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2007 214D Test 8 2007 Buick Lacrosse

V2P1 Pelvic y

Max: 68.2 [g] at 0.032 [s]
Min: -10.2 [g] at 0.062 [s]

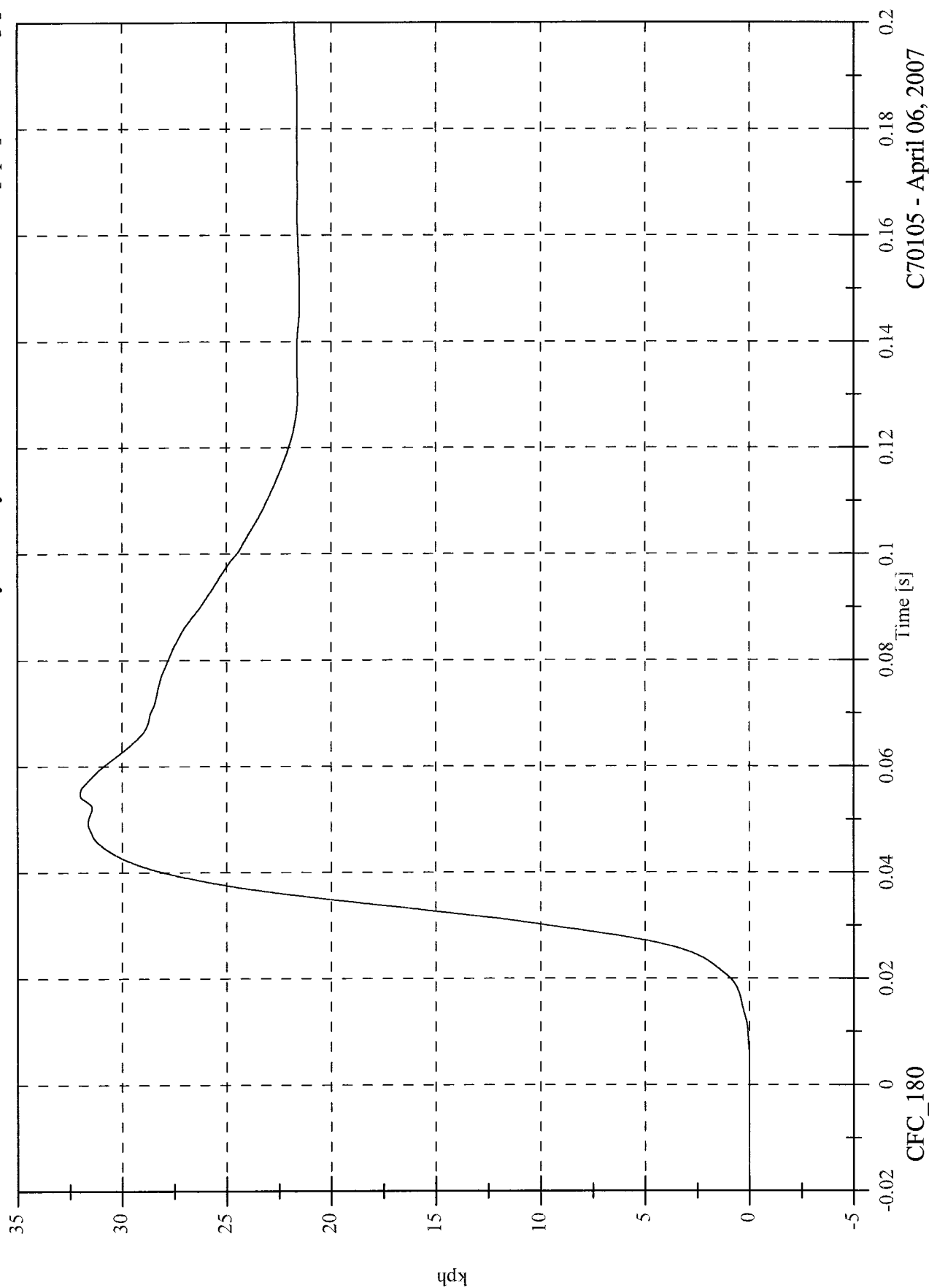


C70105 - April 06, 2007

2007 214D Test 8 2007 Buick Lacrosse

Max: 32.0 [kph] at 0.055 [s]
Min: -0.0 [kph] at -0.020 [s]

V2P1 Pelvic y Velocity

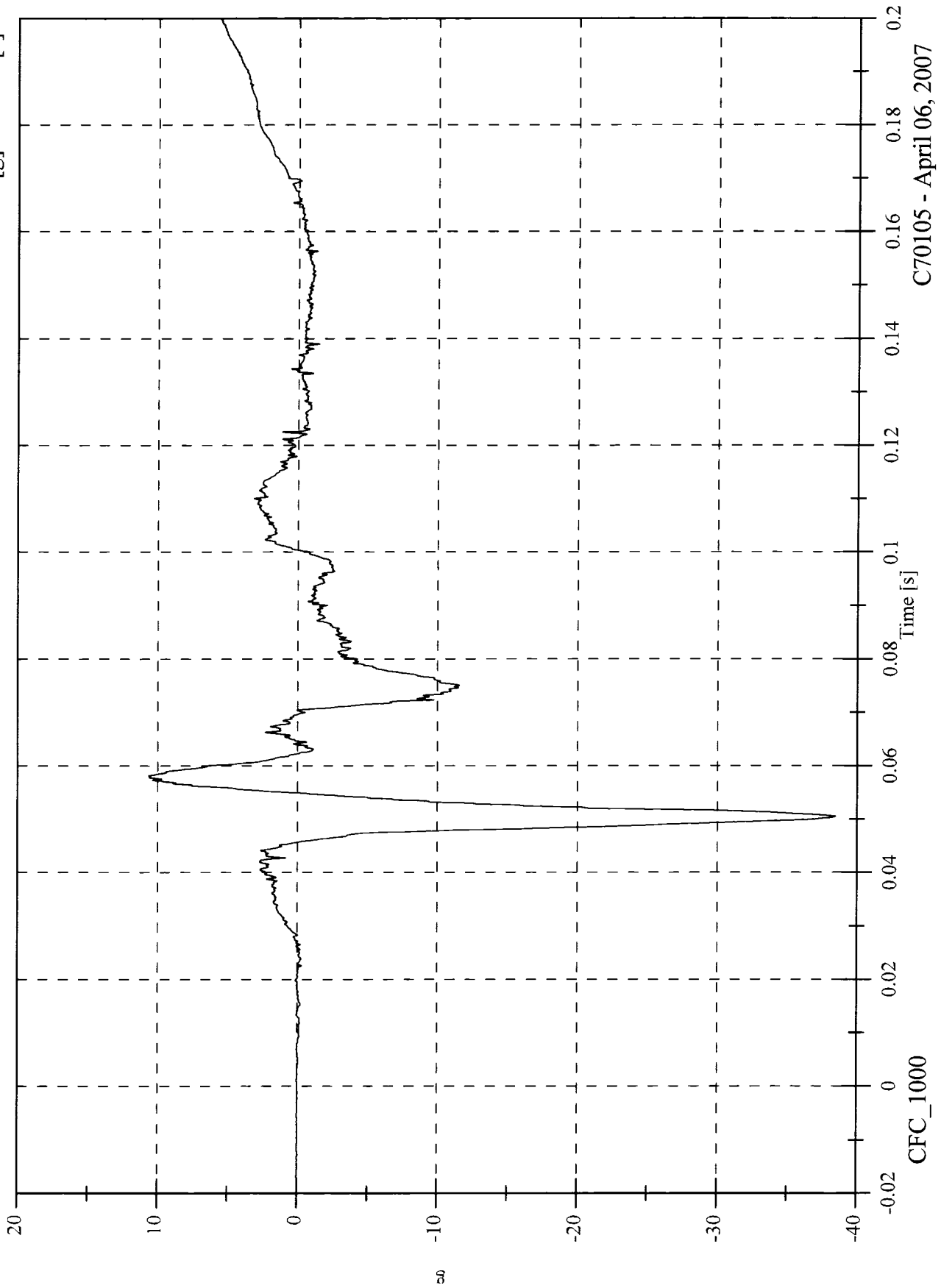


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Max: 10.6 [g] at 0.058 [s]
Min: -38.4 [g] at 0.050 [s]

V2P4 Head x

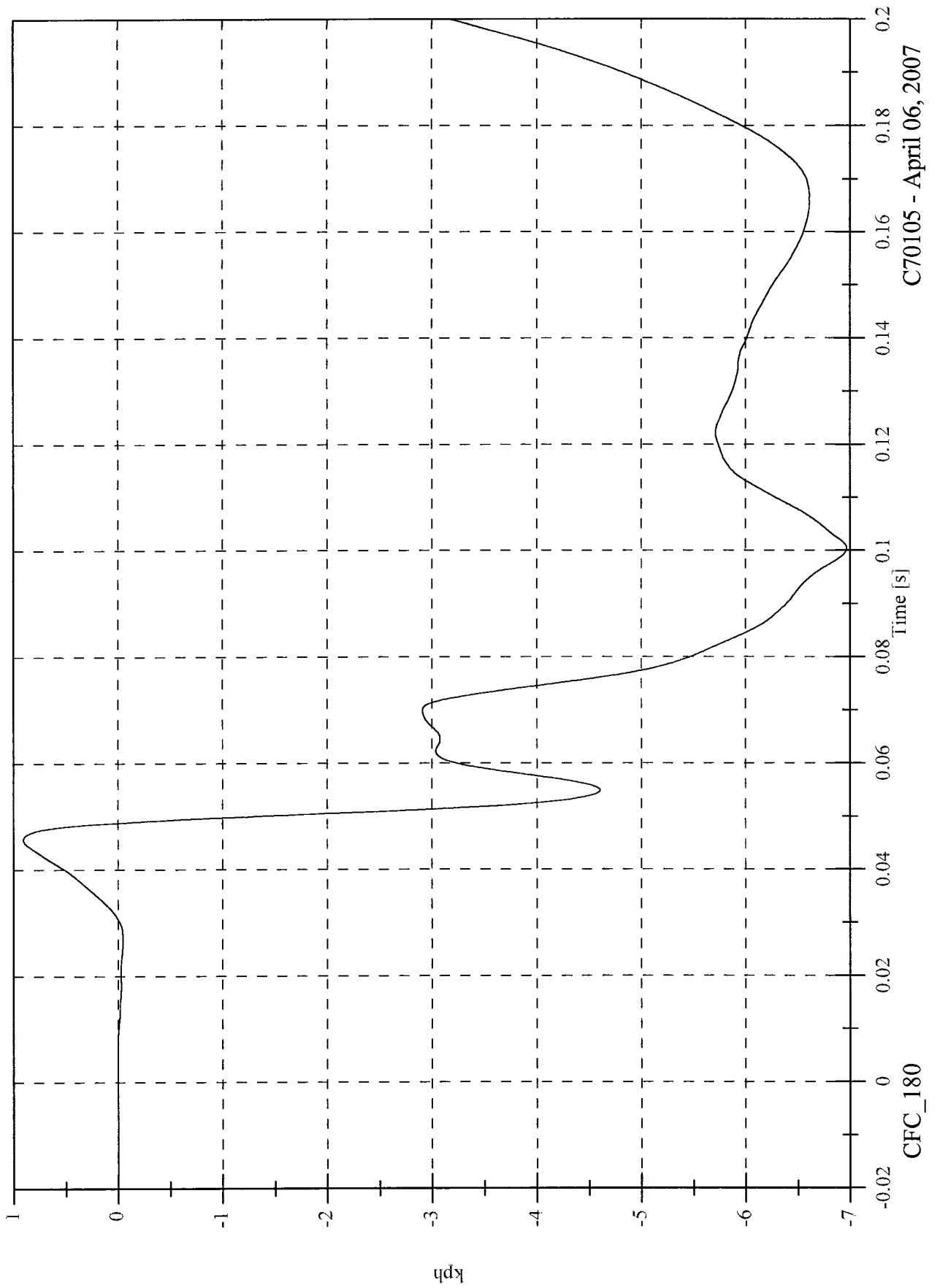


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Max: 0.9 [kph] at 0.046 [s]
Min: -7.0 [kph] at 0.100 [s]

V2P4 Head x Velocity

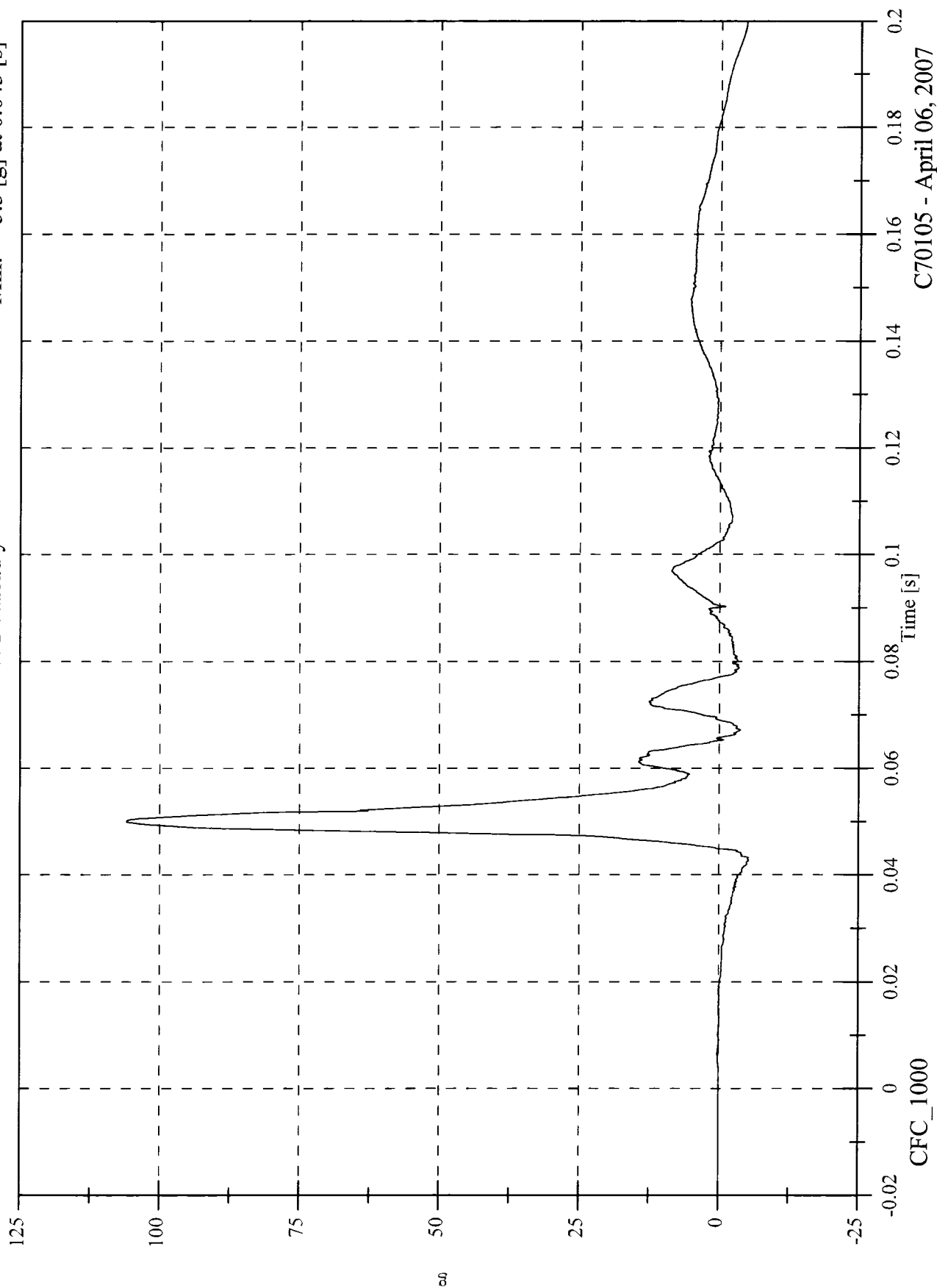


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V2P4 Head y

Max: 106.0 [g] at 0.050 [s]
Min: -5.3 [g] at 0.043 [s]

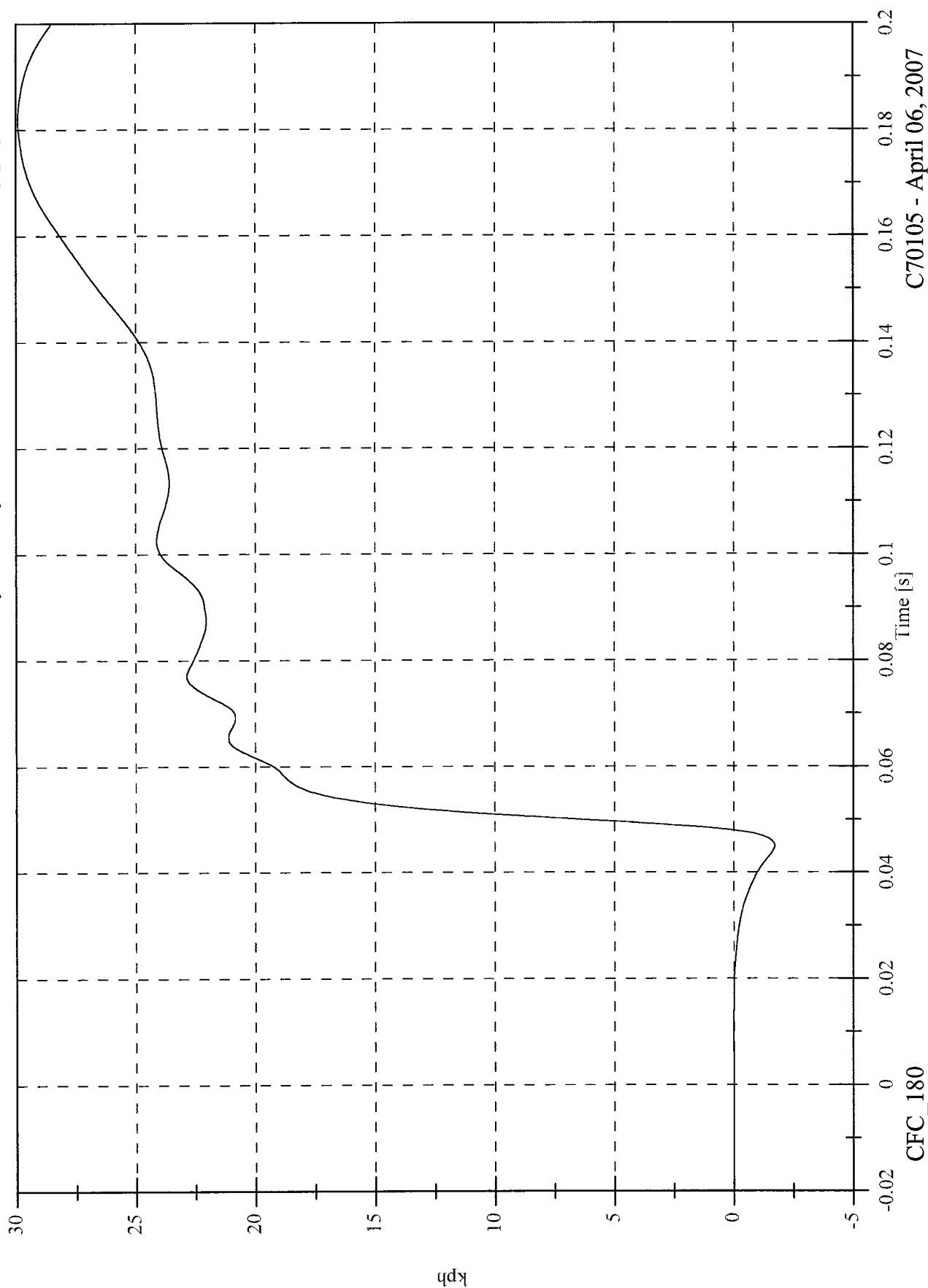


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V2P4 Head y Velocity

Max: 29.9 [kph] at 0.182 [s]
Min: -1.7 [kph] at 0.045 [s]

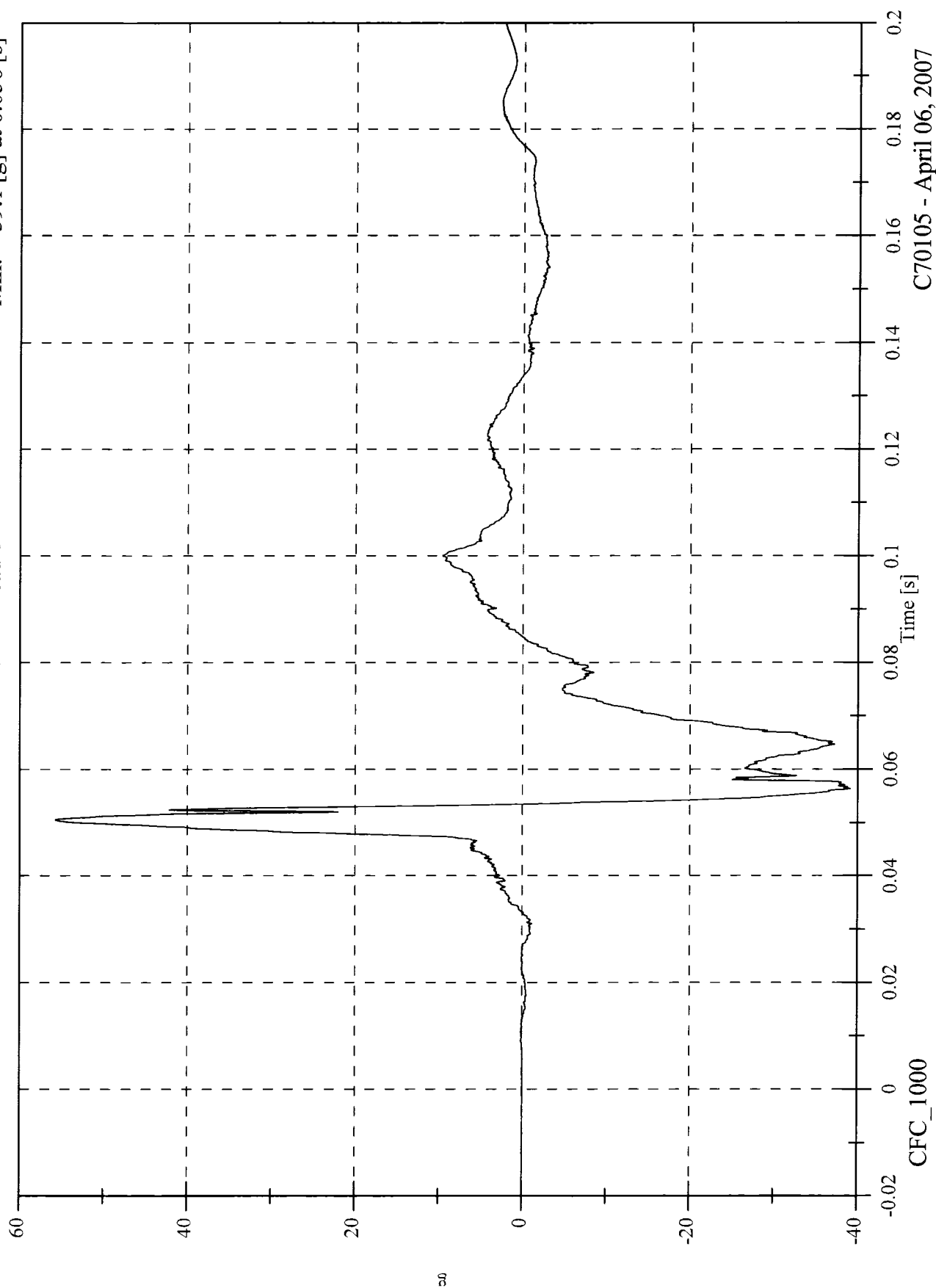


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Max: 55.7 [g] at 0.051 [s]
Min: -39.1 [g] at 0.056 [s]

V2P4 Head z

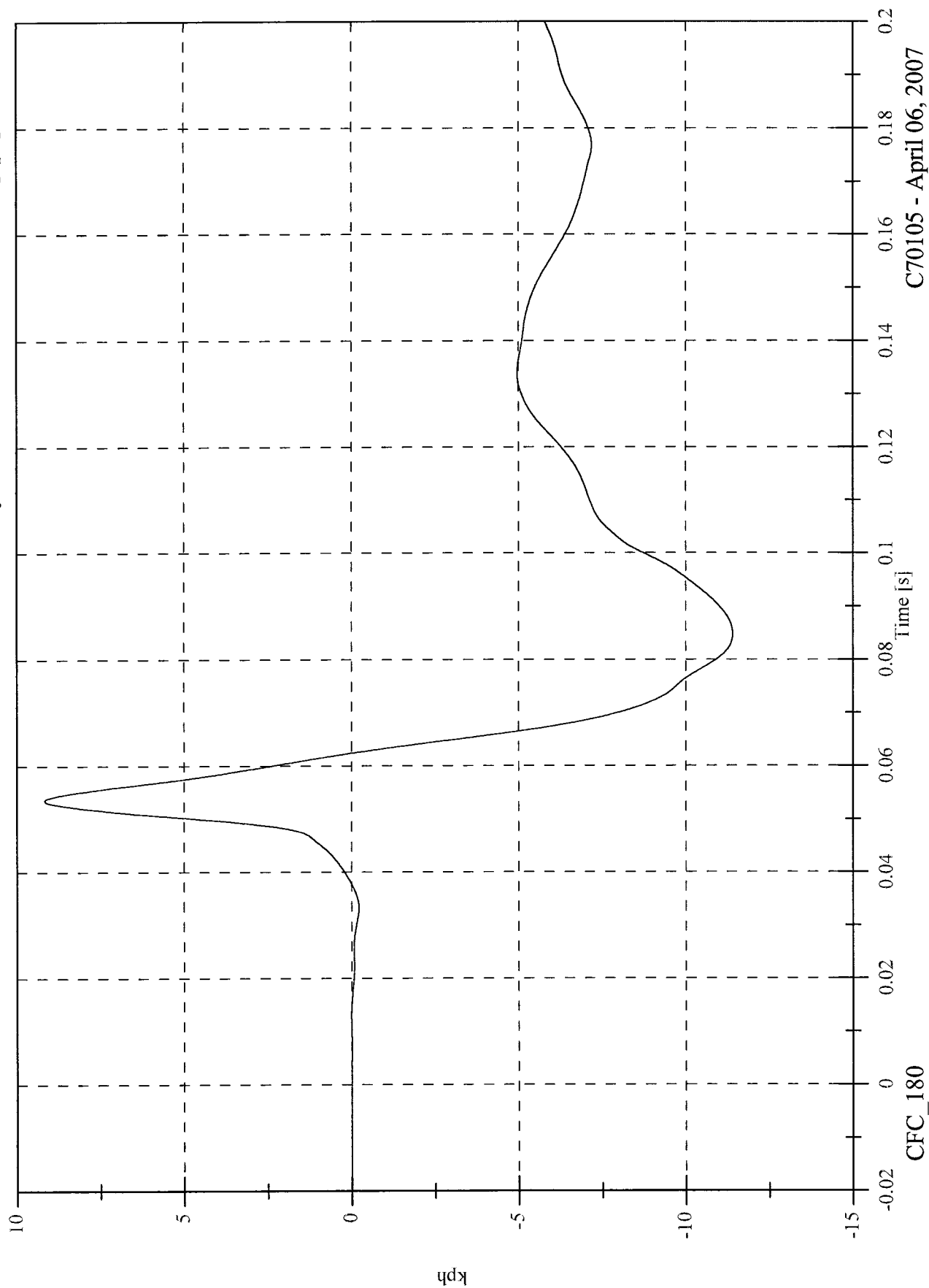


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Max: 9.2 [kph] at 0.054 [s]
Min: -11.4 [kph] at 0.085 [s]

V2P4 Head z Velocity

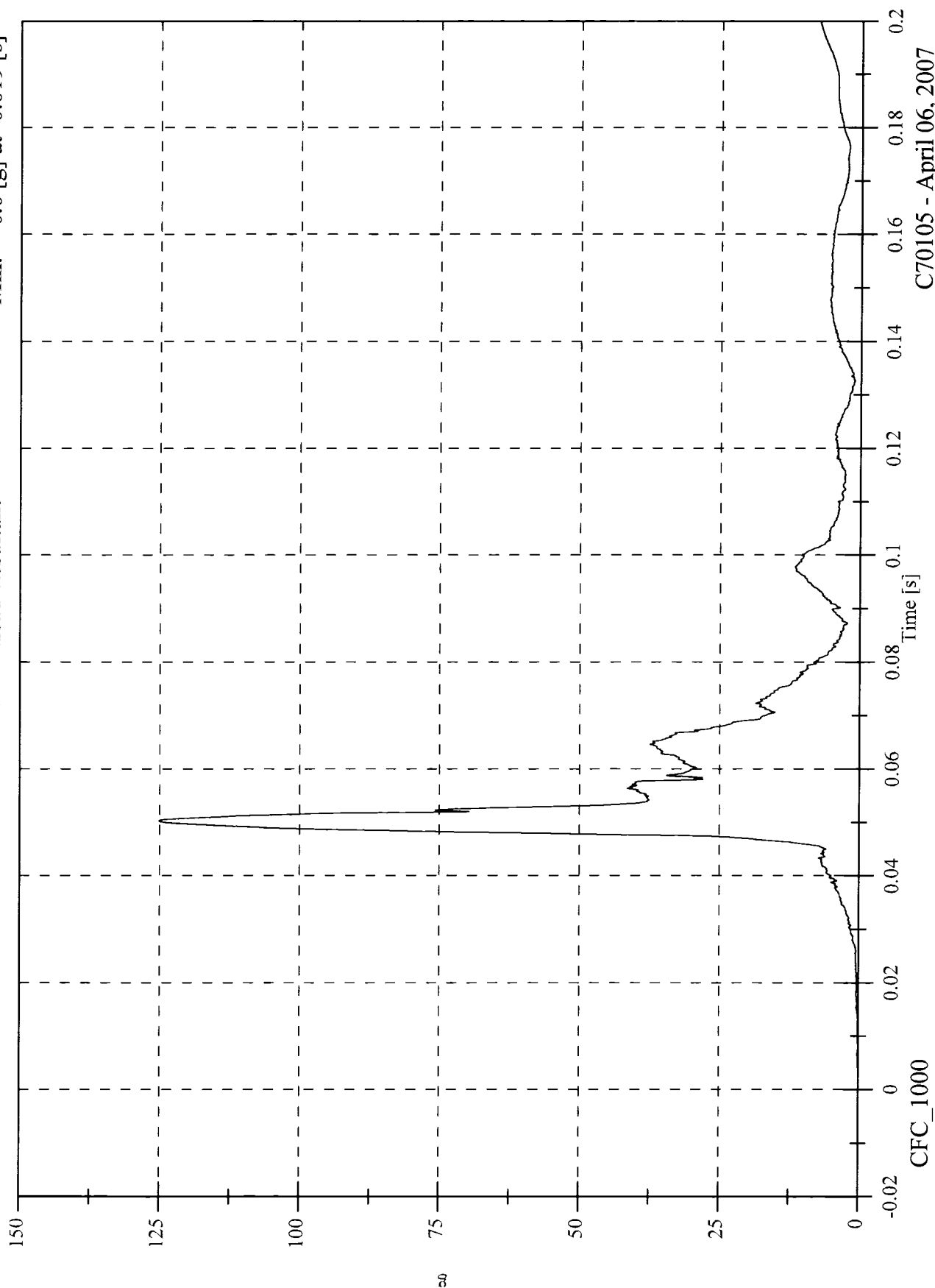


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V2P4 Head Resultant

Max: 125.1 [g] at 0.050 [s]
Min: 0.0 [g] at -0.019 [s]

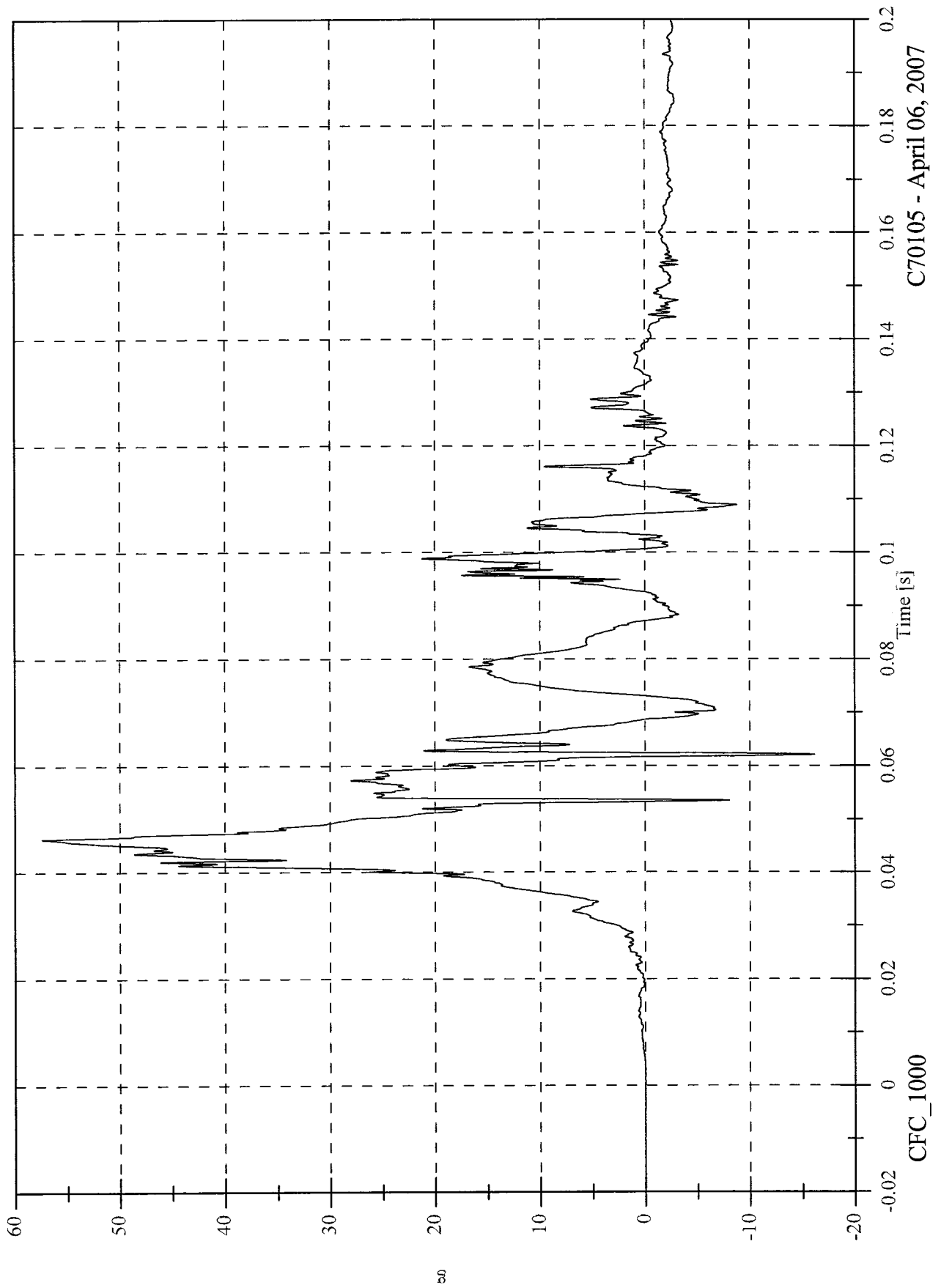


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V2P4 Upper Rib y

Max: 57.4 [g] at 0.046 [s]
Min: -16.2 [g] at 0.062 [s]

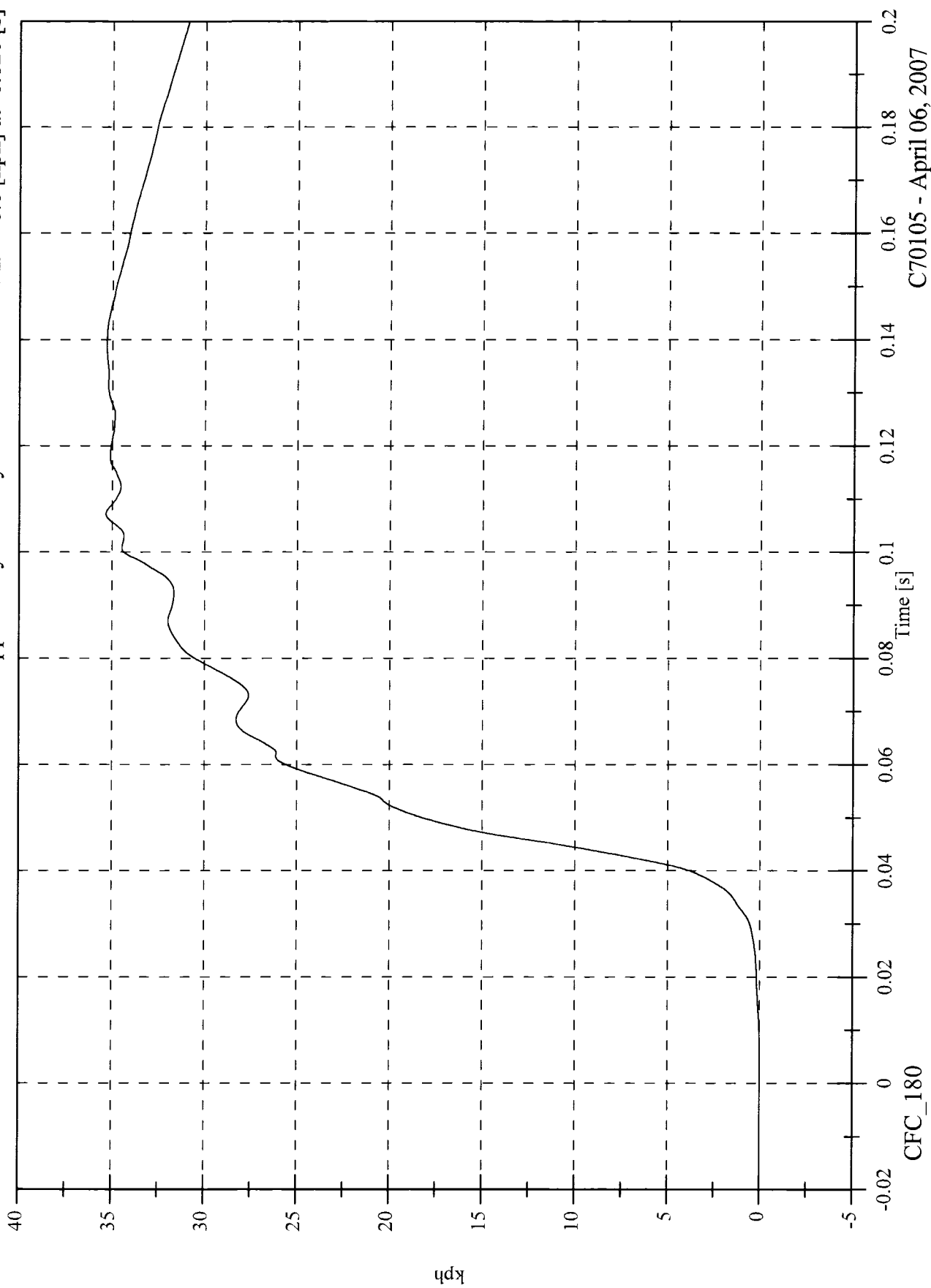


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V2P4 Upper Rib y Velocity

Max: 35.3 [kph] at 0.107 [s]
Min: -0.0 [kph] at -0.020 [s]

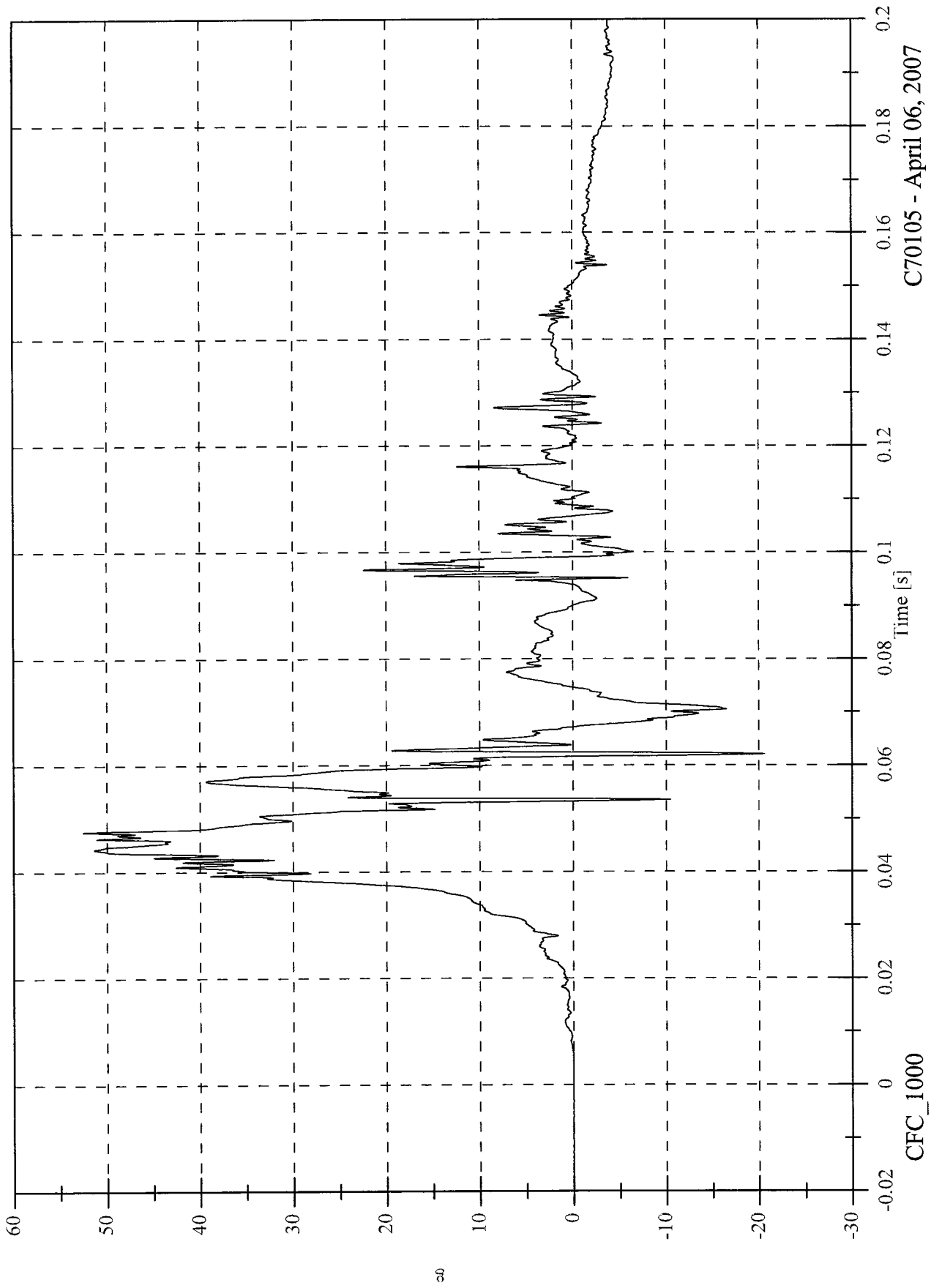


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V2P4 Lower Rib y

Max: 52.5 [g] at 0.048 [s]
Min: -20.6 [g] at 0.062 [s]

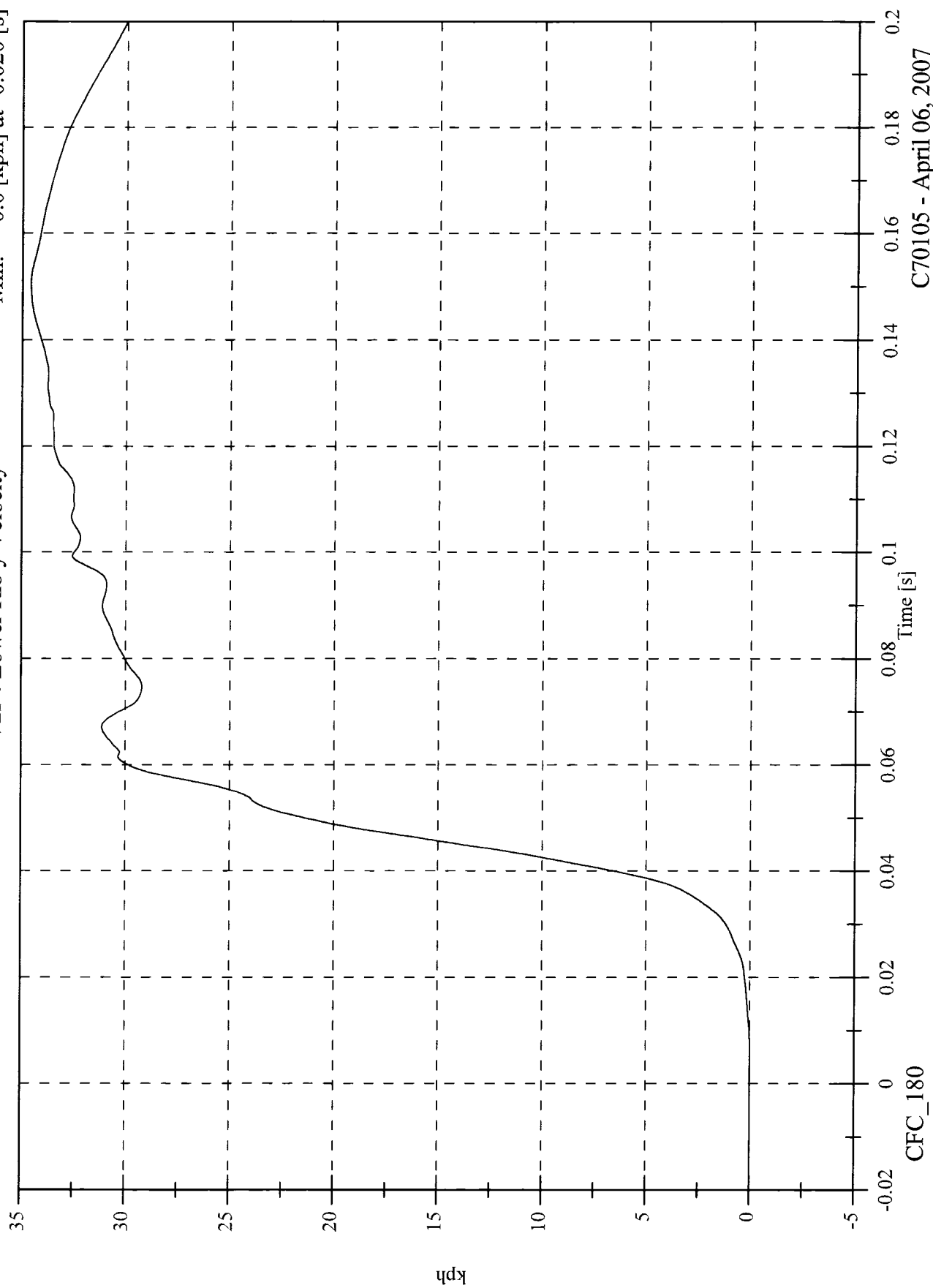


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V2P4 Lower Rib y Velocity

Max: 34.6 [kph] at 0.151 [s]
Min: -0.0 [kph] at -0.020 [s]

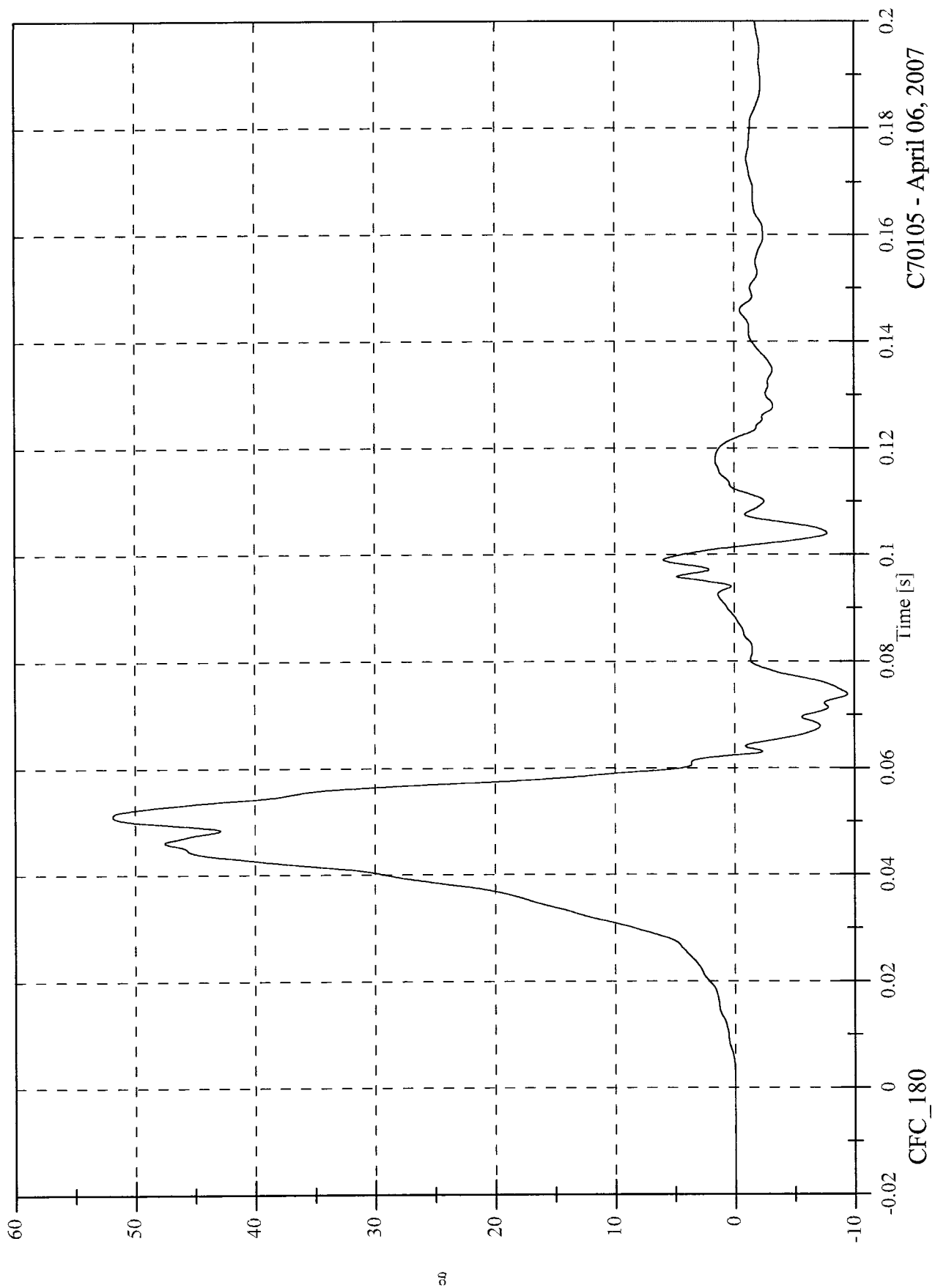


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Max: 51.8 [g] at 0.051 [s]
Min: -9.4 [g] at 0.074 [s]

V2P4 Lower Spine y

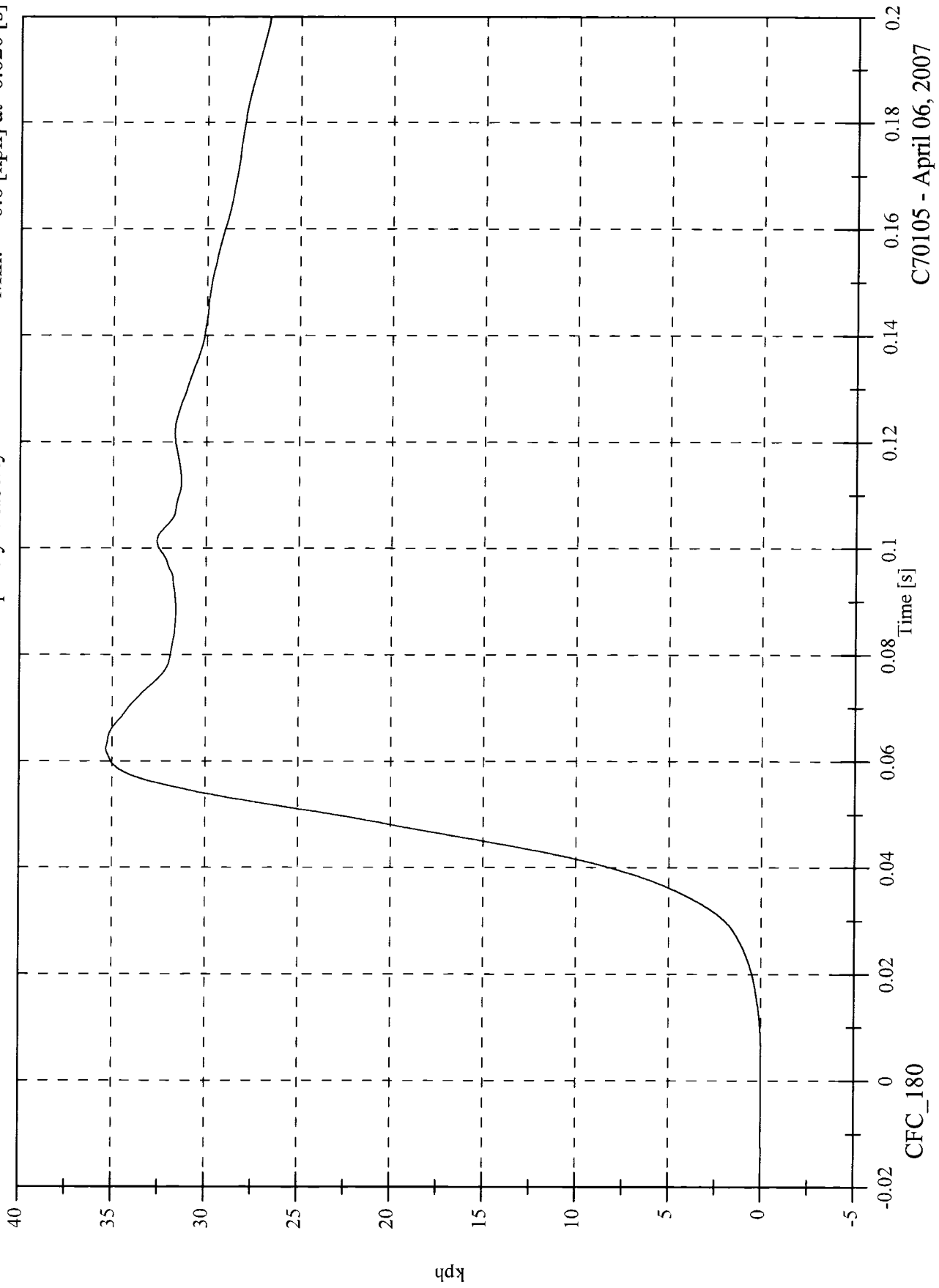


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V2P4 Lower Spine y Velocity

Max: 35.3 [kph] at 0.062 [s]
Min: -0.0 [kph] at -0.020 [s]

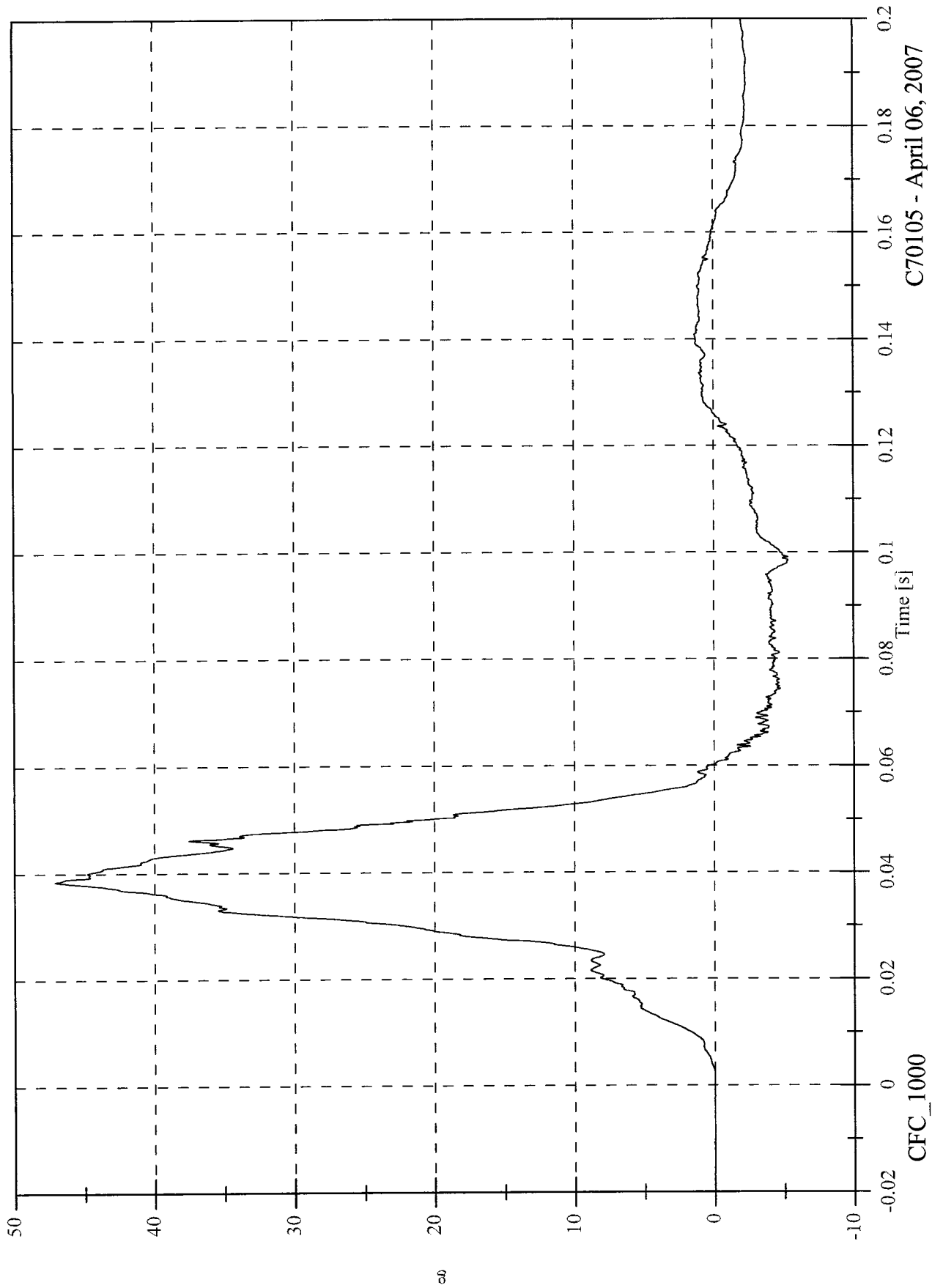


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V2P4 Pelvic y

Max: 47.1 [g] at 0.038 [s]
Min: -5.3 [g] at 0.098 [s]

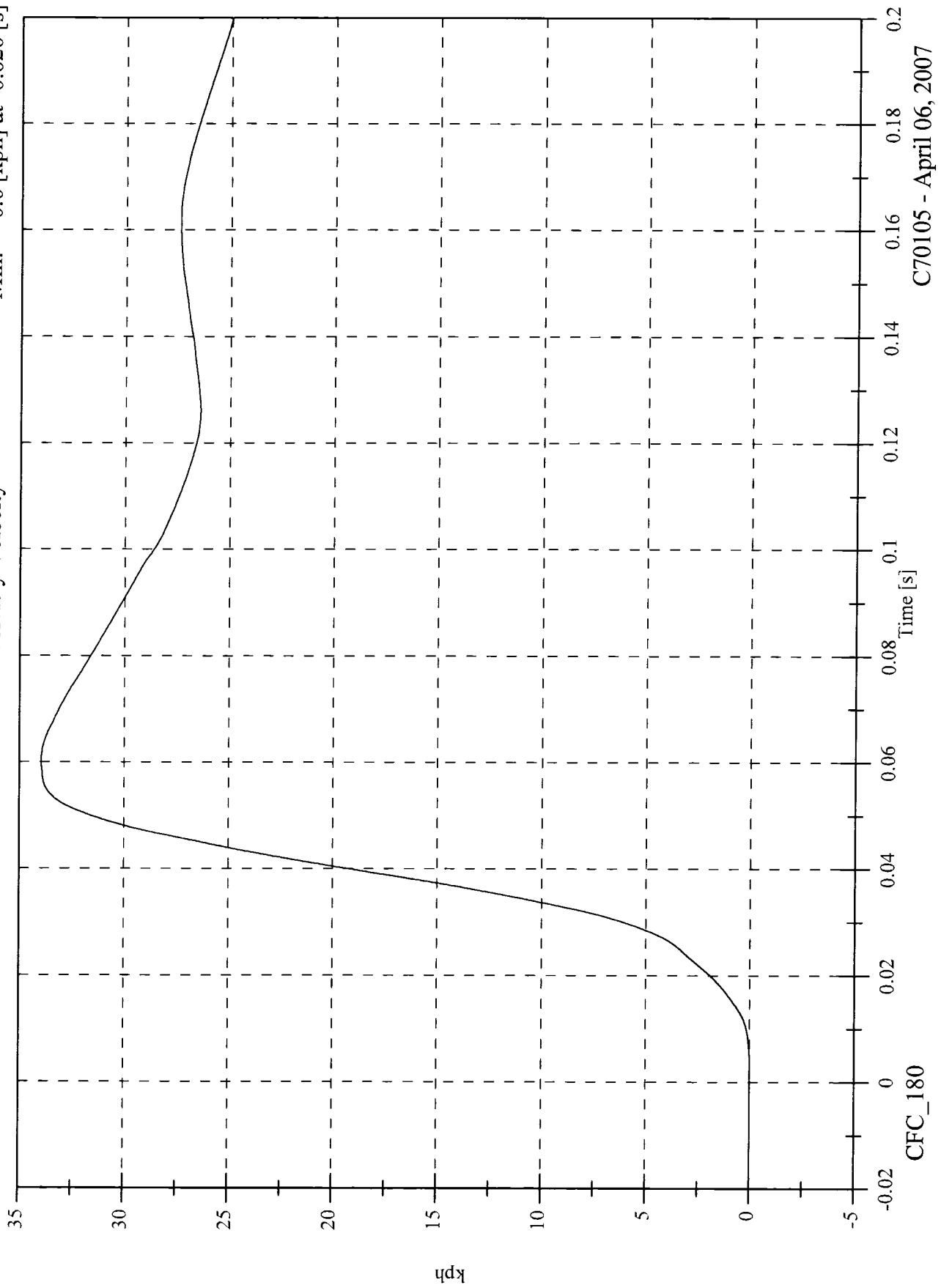


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V2P4 Pelvic y Velocity

Max: 34.0 [kph] at 0.060 [s]
Min: -0.0 [kph] at -0.020 [s]

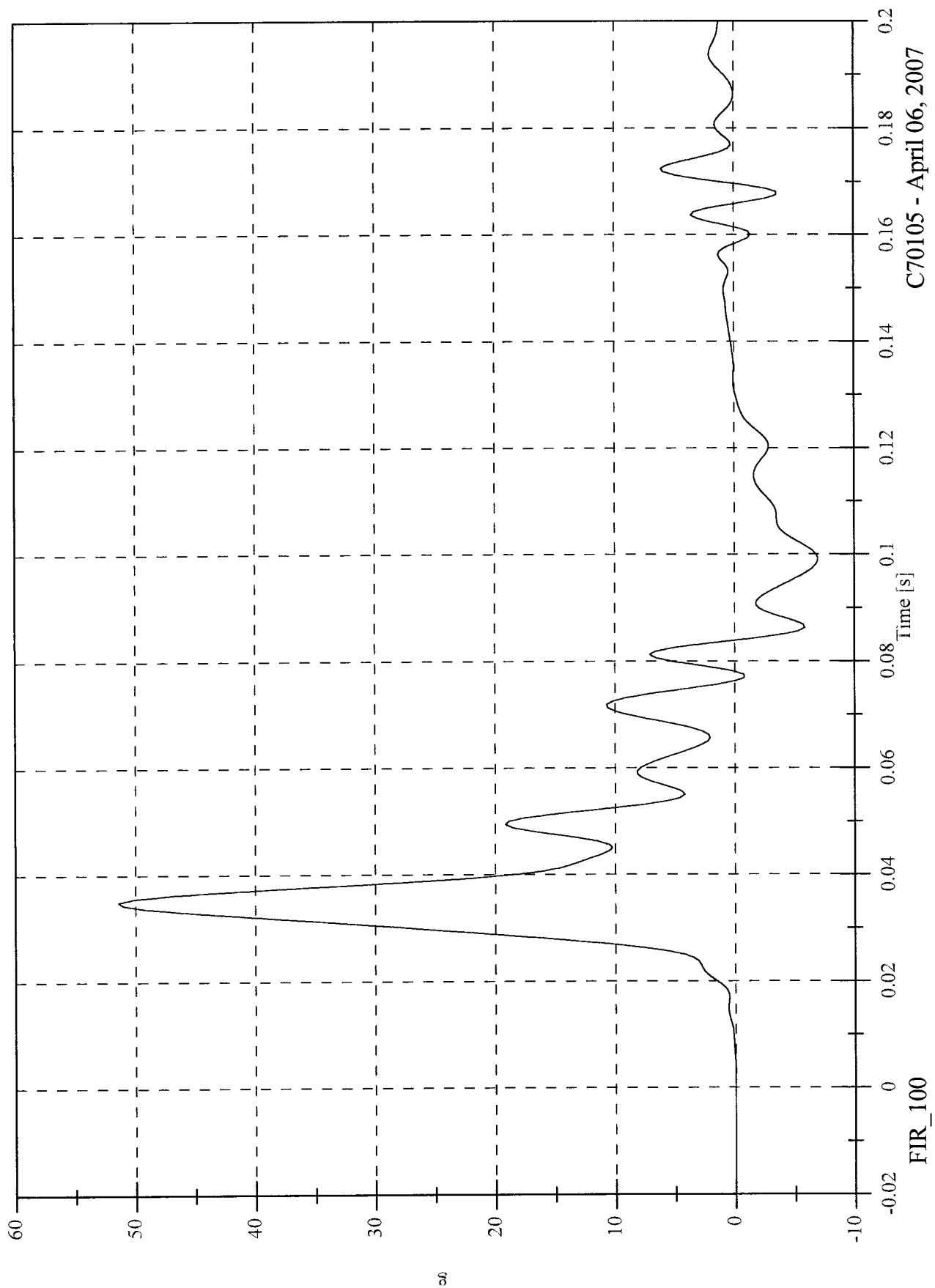


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V2P1 Upper Rib y

Max: 51.4 [g] at 0.035 [s]
Min: -6.9 [g] at 0.099 [s]

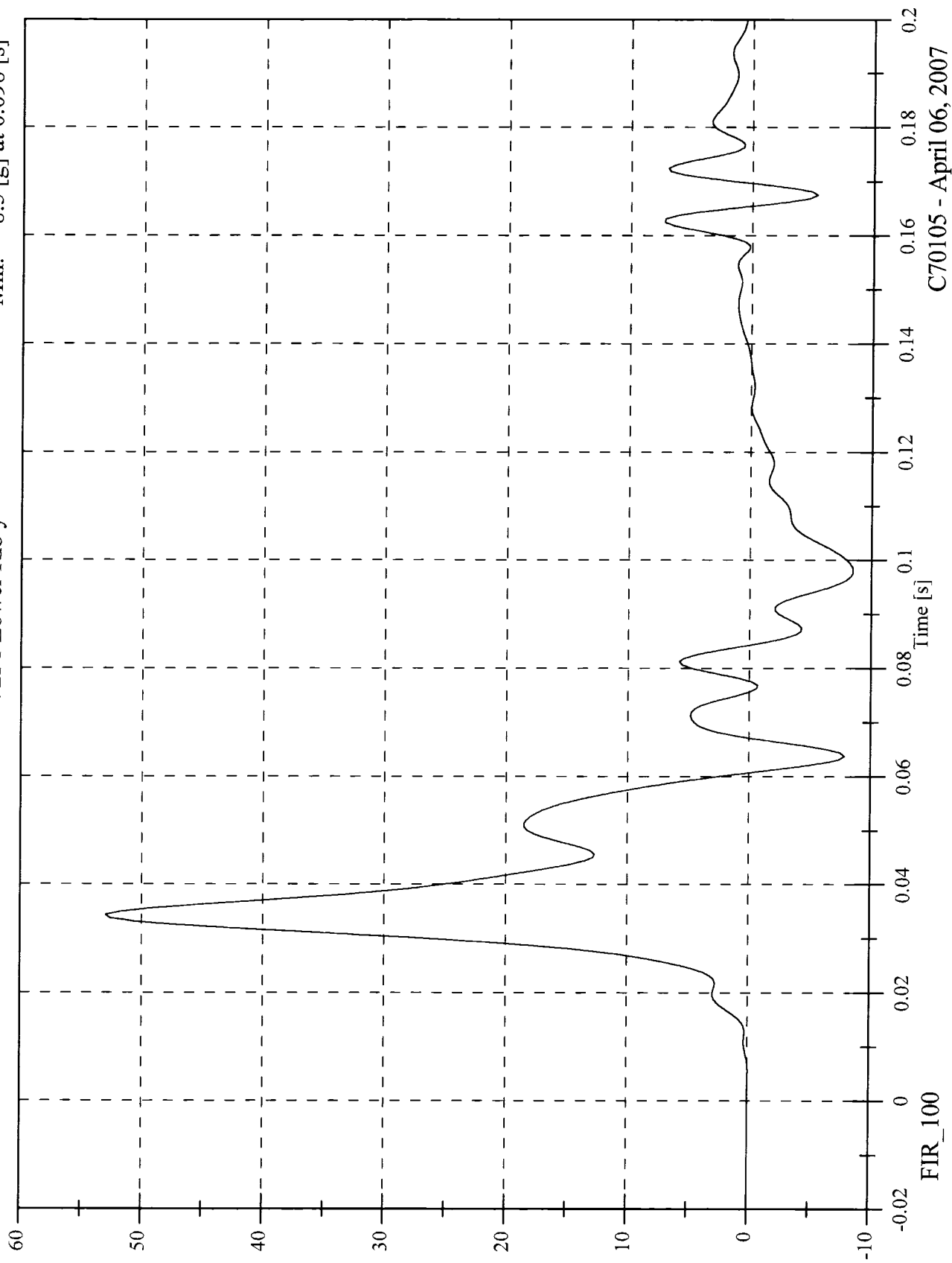


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V2P1 Lower Rib y

Max: 52.9 [g] at 0.034 [s]
Min: -8.5 [g] at 0.098 [s]

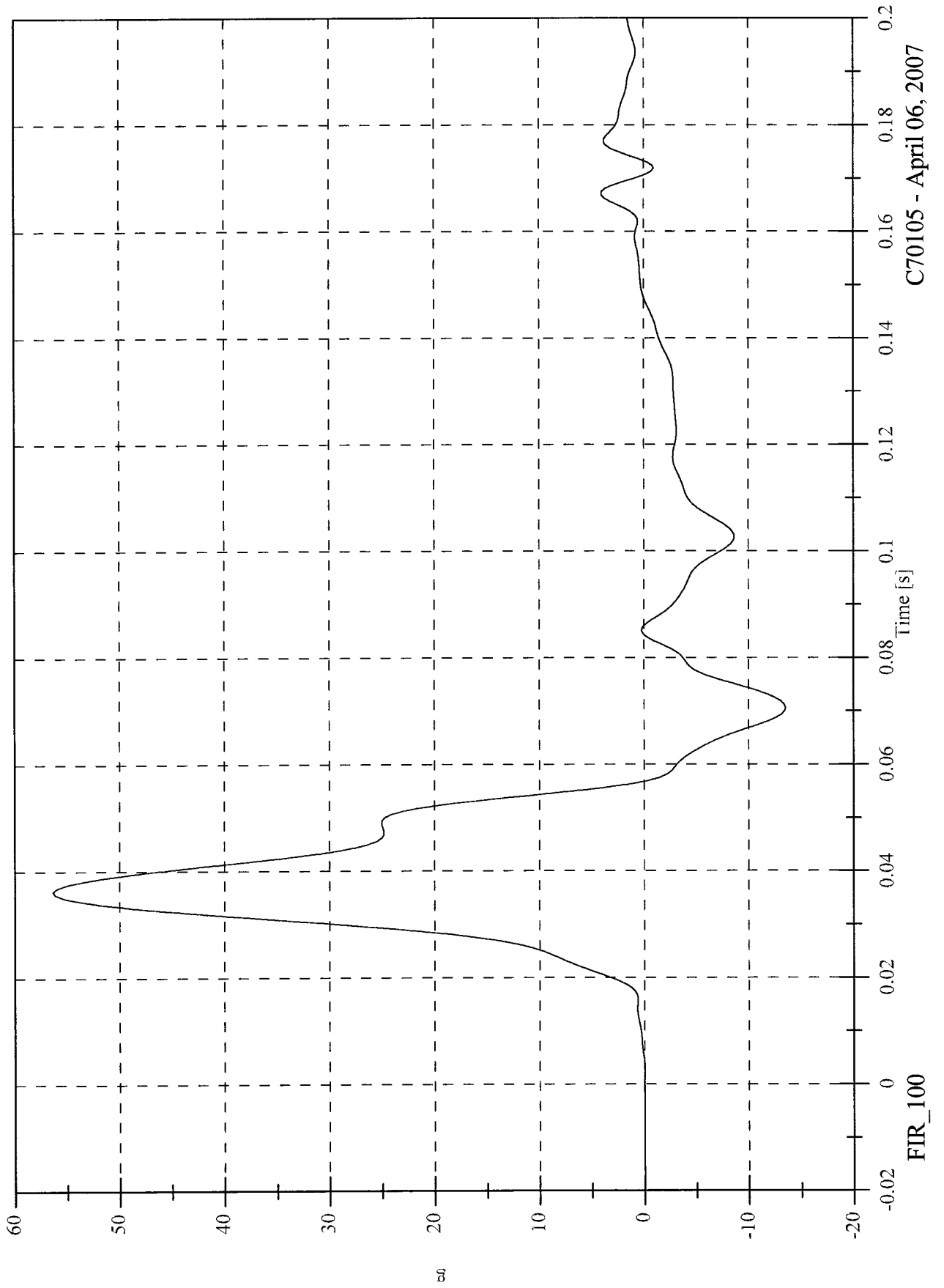


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Max: 56.4 [g] at 0.036 [s]
Min: -13.5 [g] at 0.071 [s]

V2P1 Lower Spine y

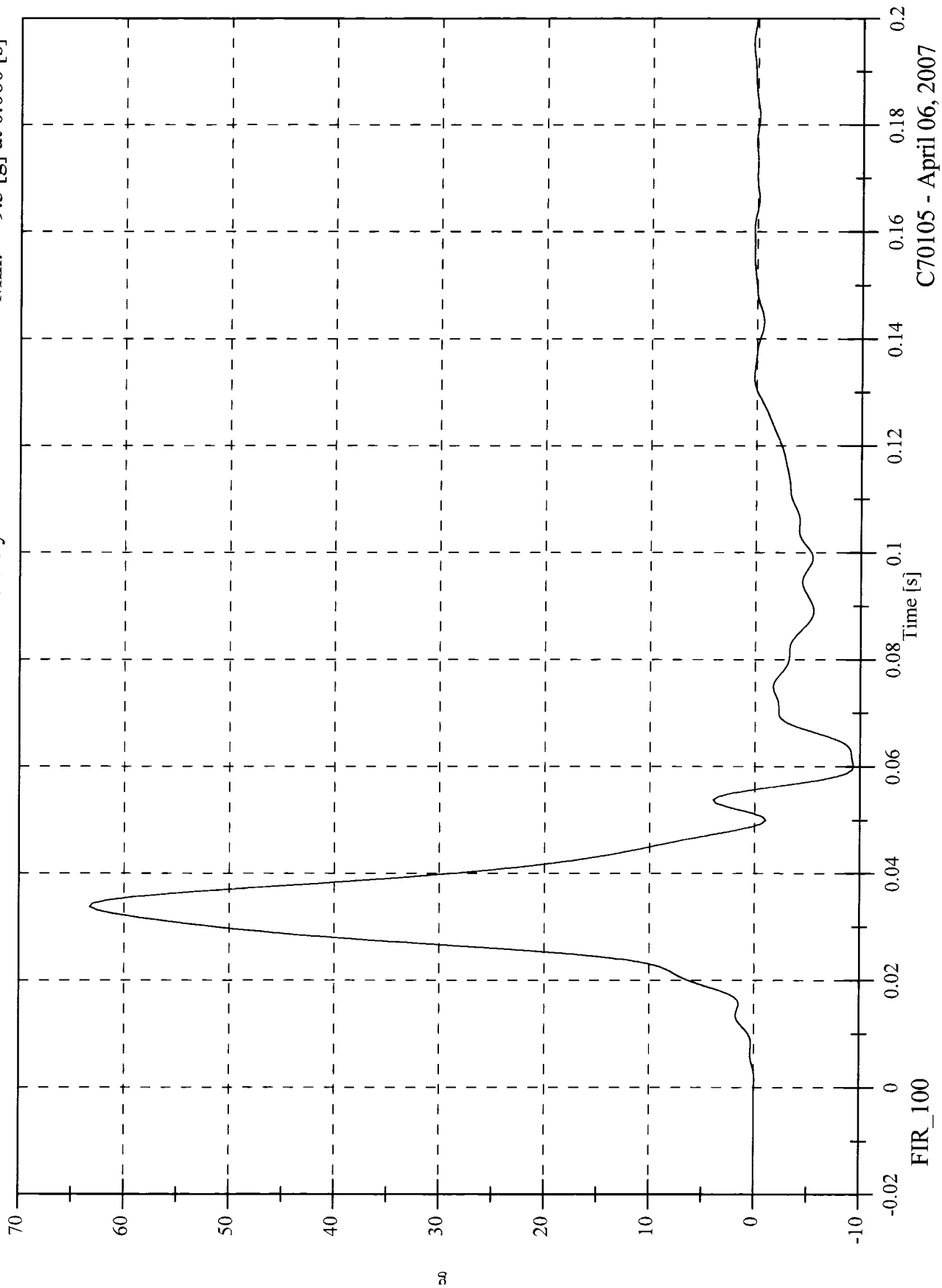


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V2P1 Pelvic y

Max: 63.3 [g] at 0.034 [s]
Min: -9.3 [g] at 0.060 [s]

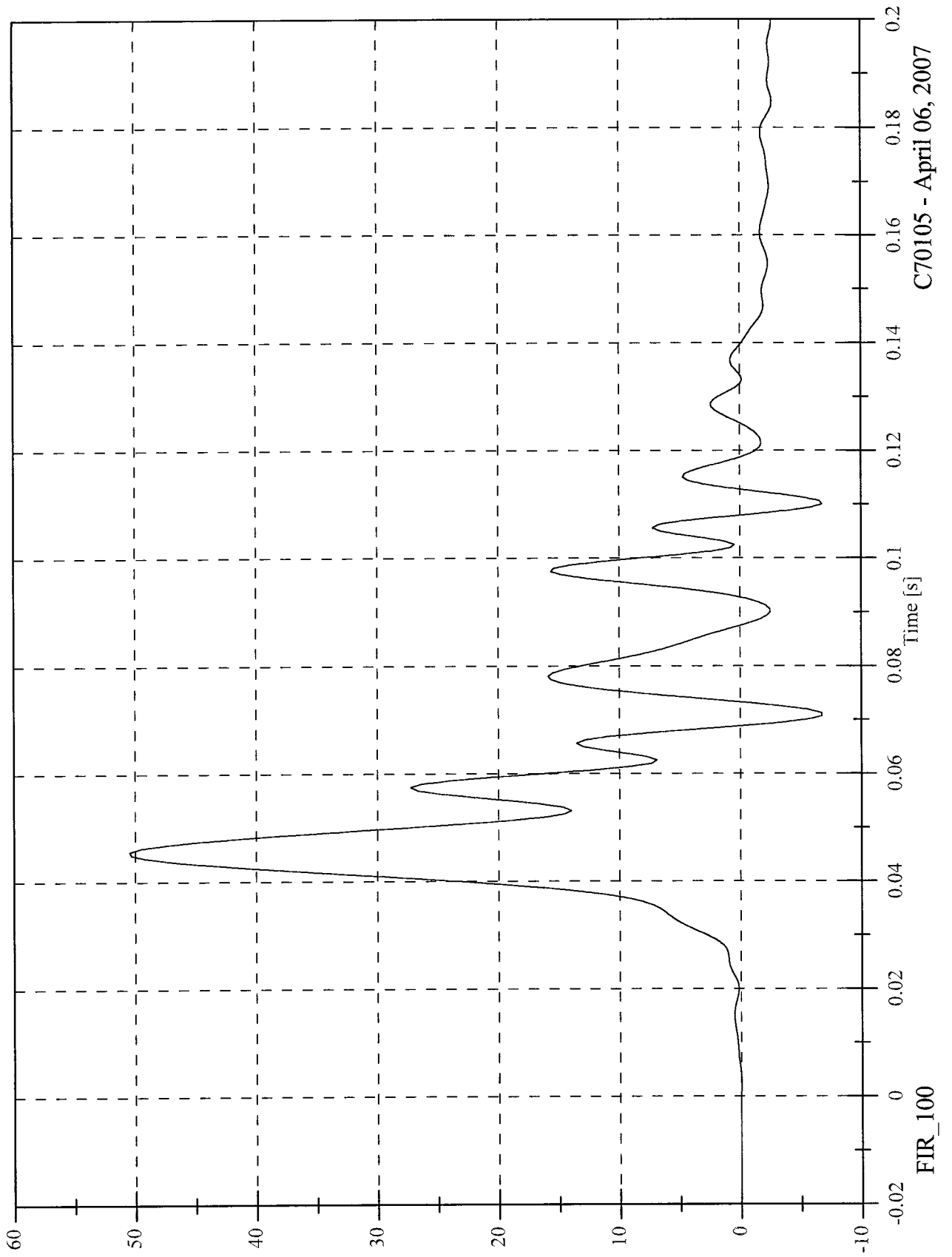


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V2P4 Upper Rib y

Max: 50.5 [g] at 0.046 [s]
Min: -6.8 [g] at 0.110 [s]

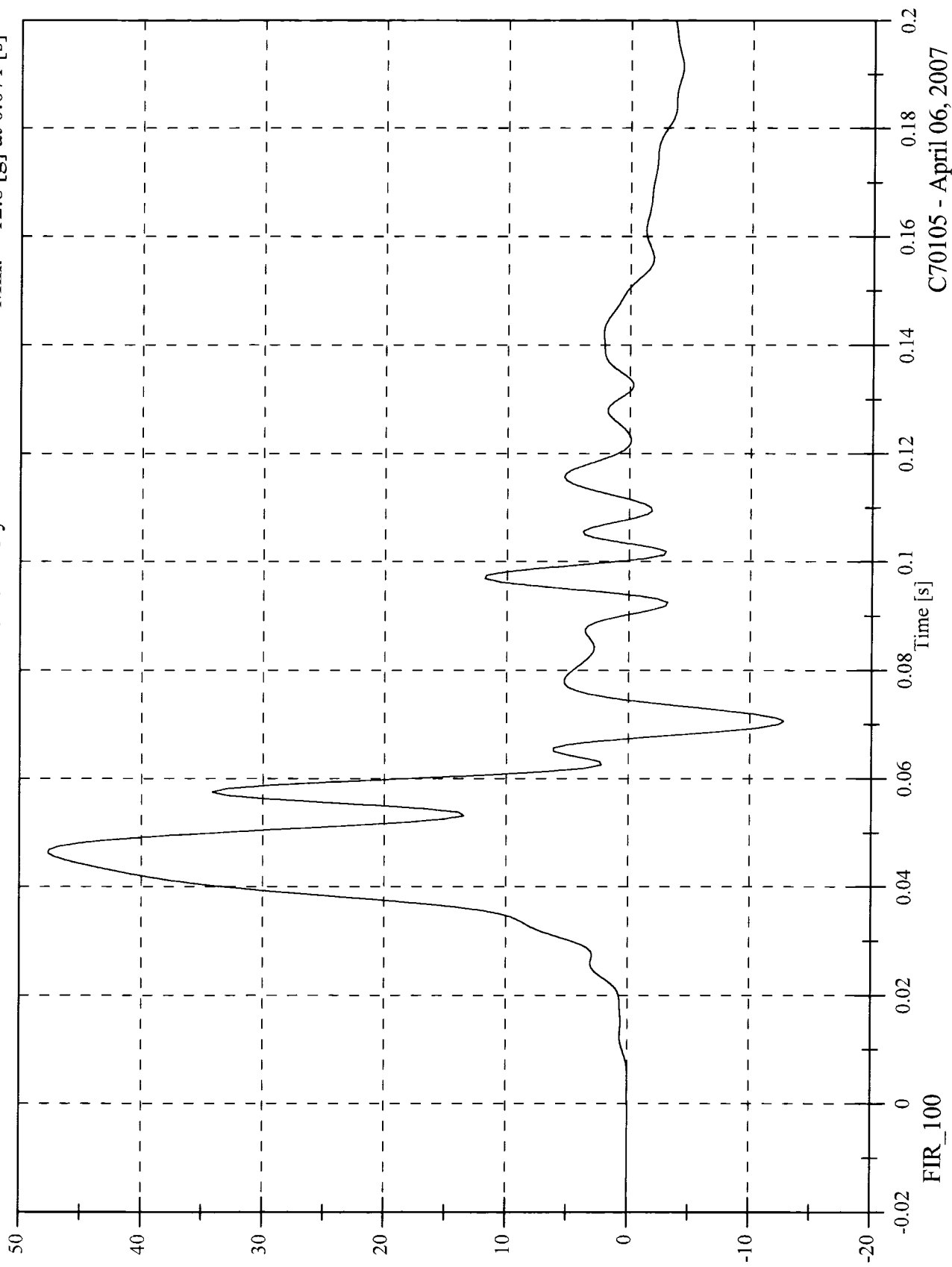


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2007 214D Test 8 2007 Buick Lacrosse

V2P4 Lower Rib y

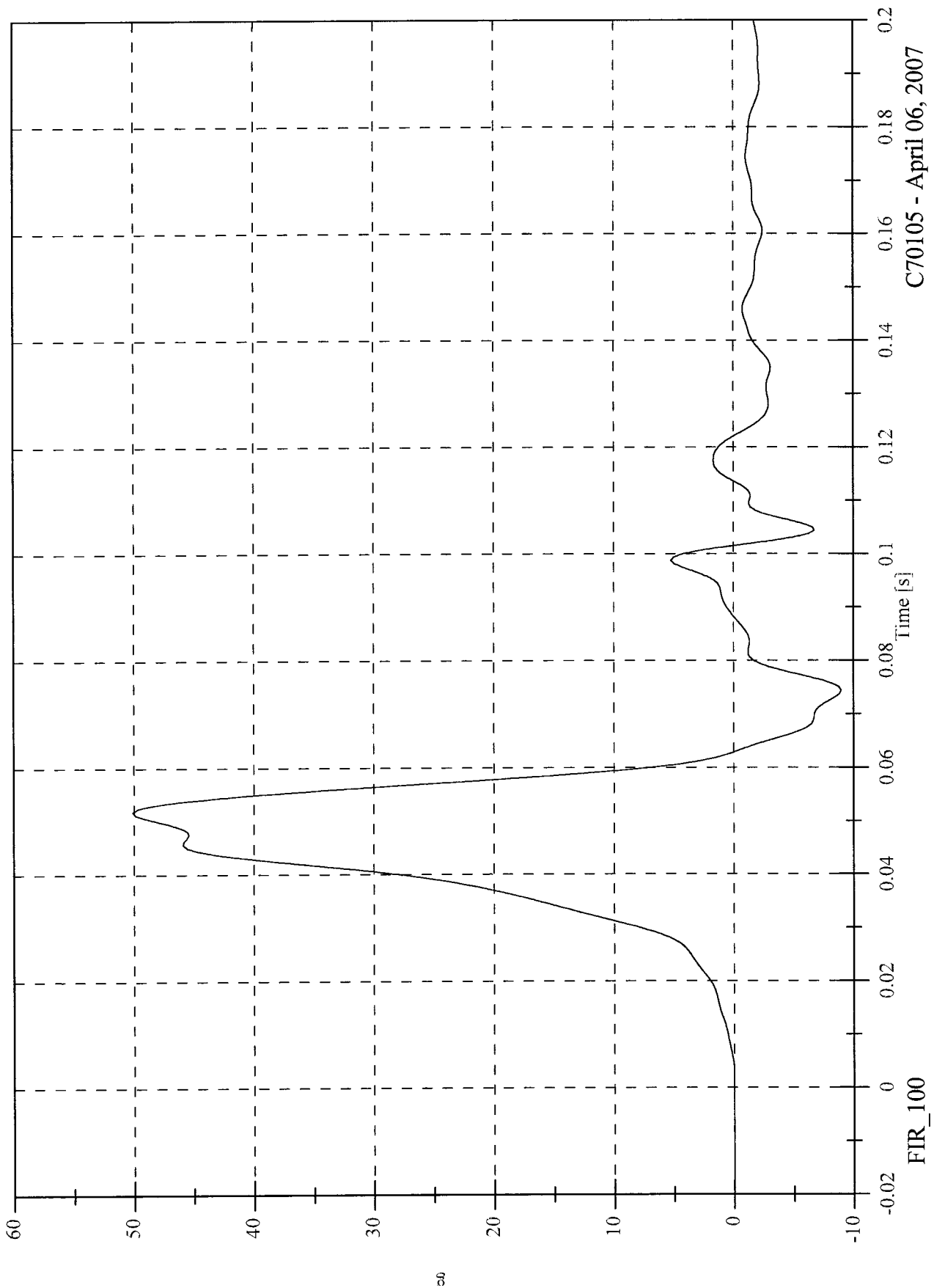
Max: 47.7 [g] at 0.046 [s]
Min: -12.8 [g] at 0.071 [s]



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V2P4 Lower Spine y

Max: 50.1 [g] at 0.052 [s]
Min: -8.9 [g] at 0.074 [s]

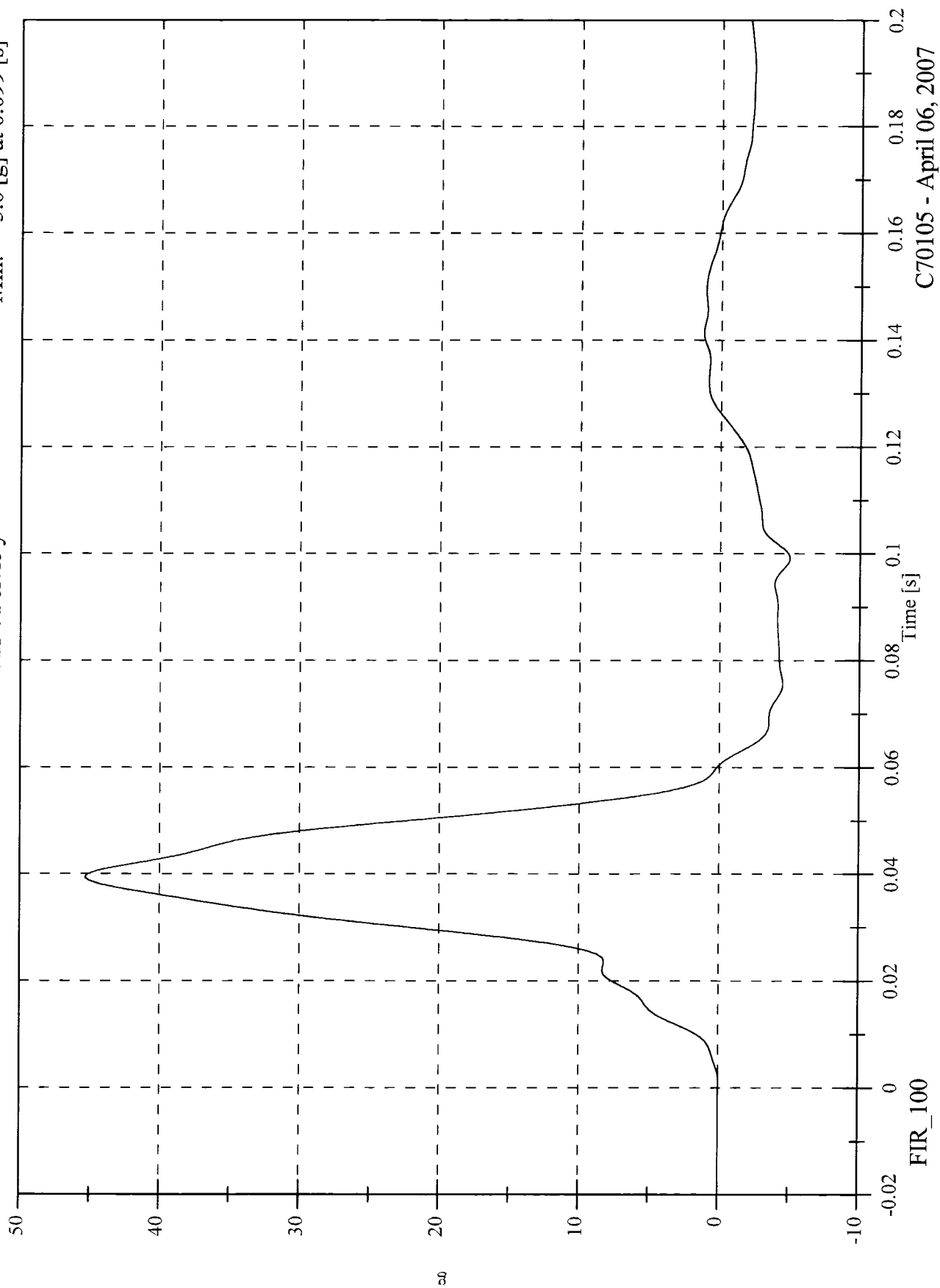


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V2P4 Pelvic y

Max: 45.3 [g] at 0.039 [s]
Min: -5.0 [g] at 0.099 [s]

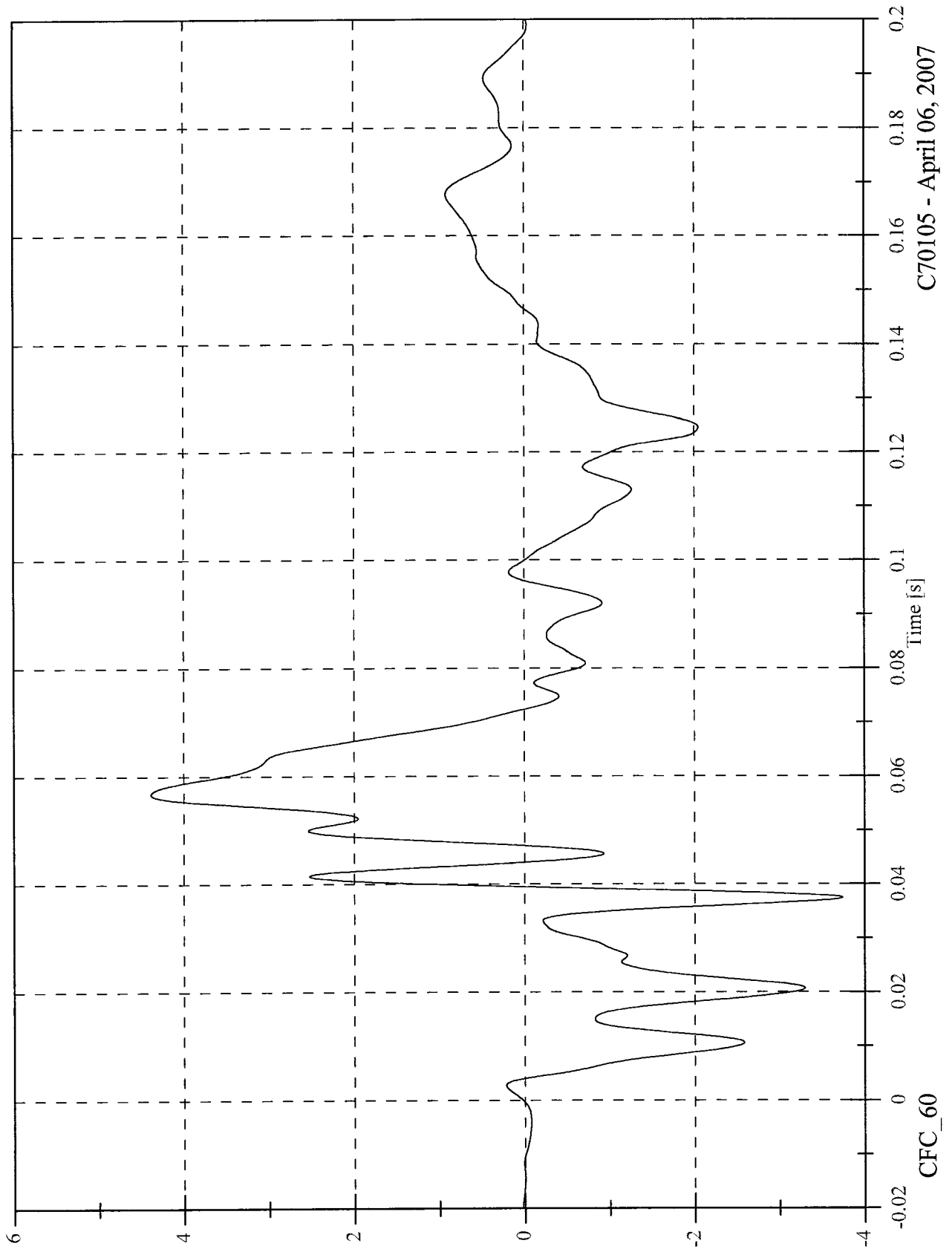


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V2 A1 Right Front Sill X

Max: 4.4 [g] at 0.057 [s]
Min: -3.7 [g] at 0.037 [s]

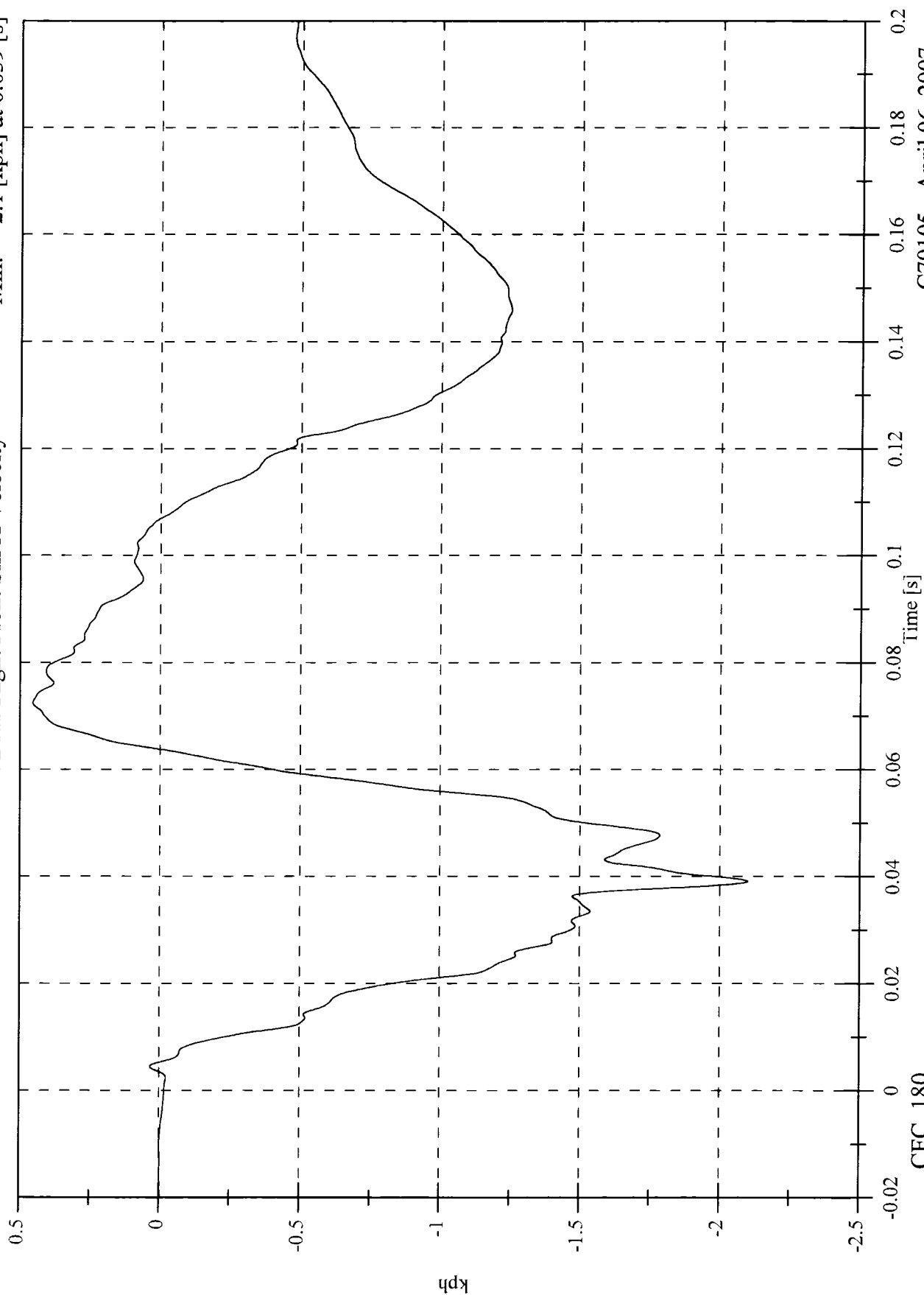


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V2 A1 Right Front Sill X Velocity

Max: 0.5 [kph] at 0.072 [s]
Min: -2.1 [kph] at 0.039 [s]

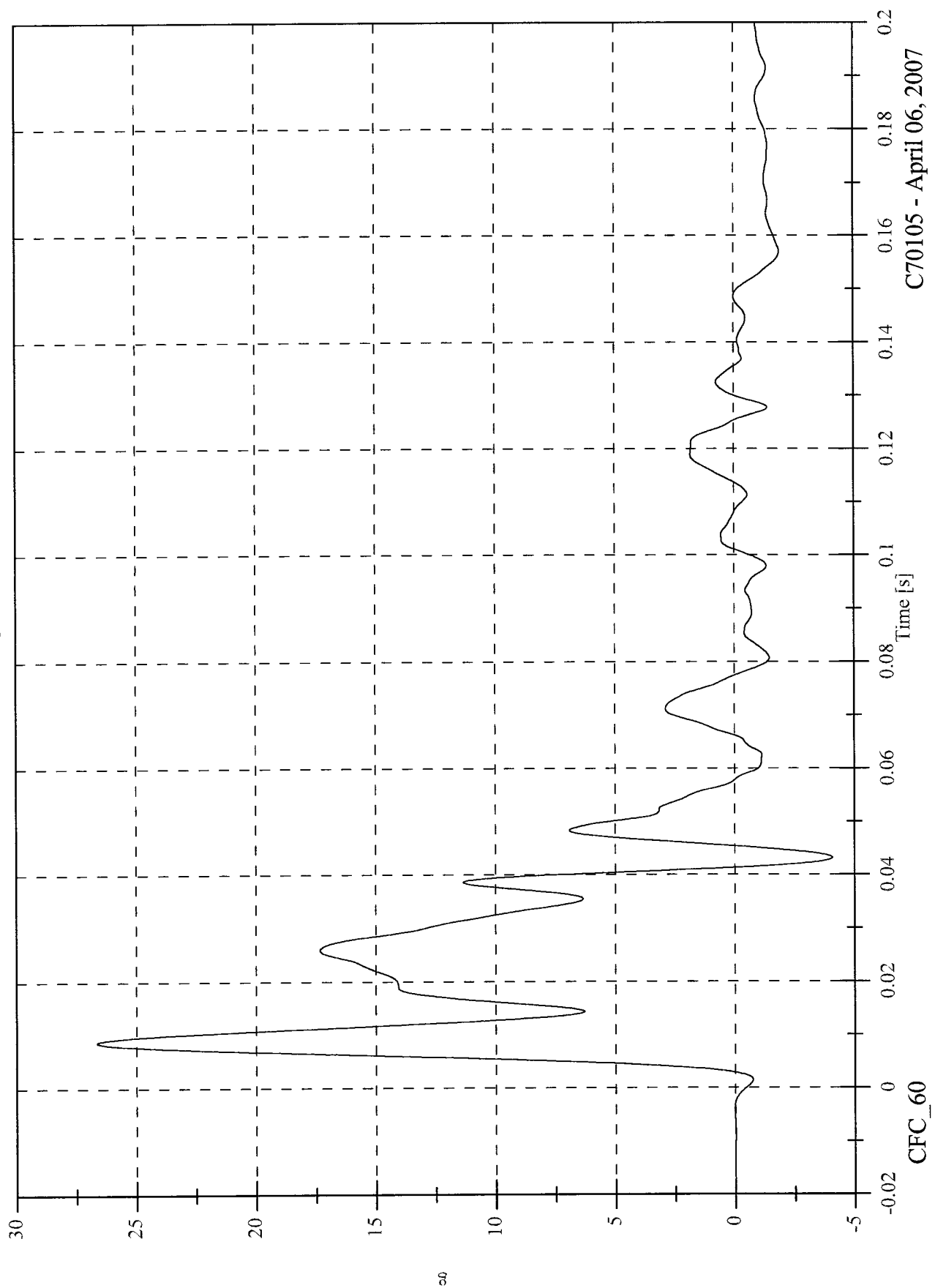


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V2 A1 Right Front Sill Y

Max: 26.6 [g] at 0.009 [s]
Min: -4.1 [g] at 0.043 [s]

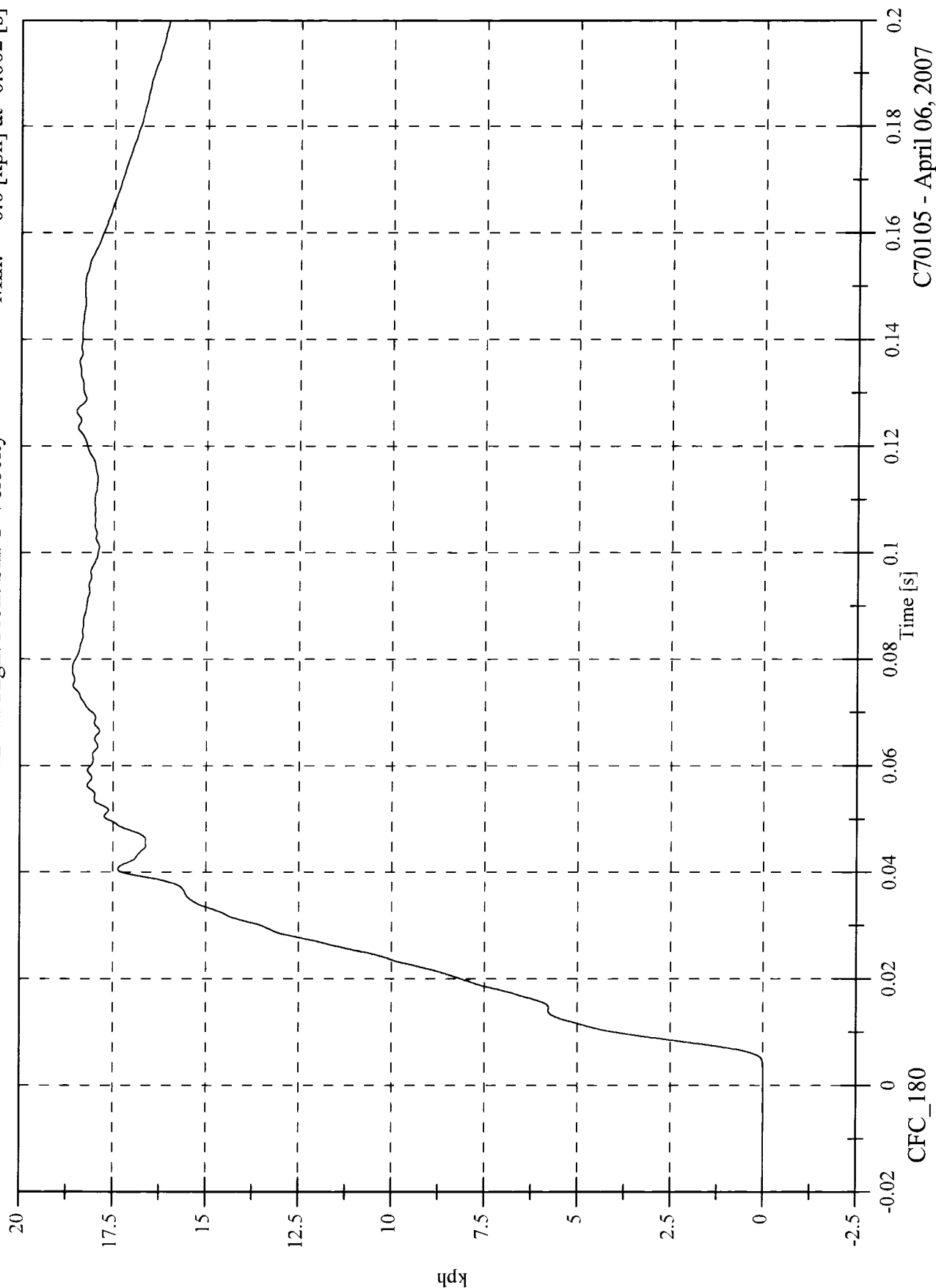


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V2 A1 Right Front Sill Y Velocity

Max: 18.6 [kph] at 0.078 [s]
Min: -0.0 [kph] at -0.002 [s]

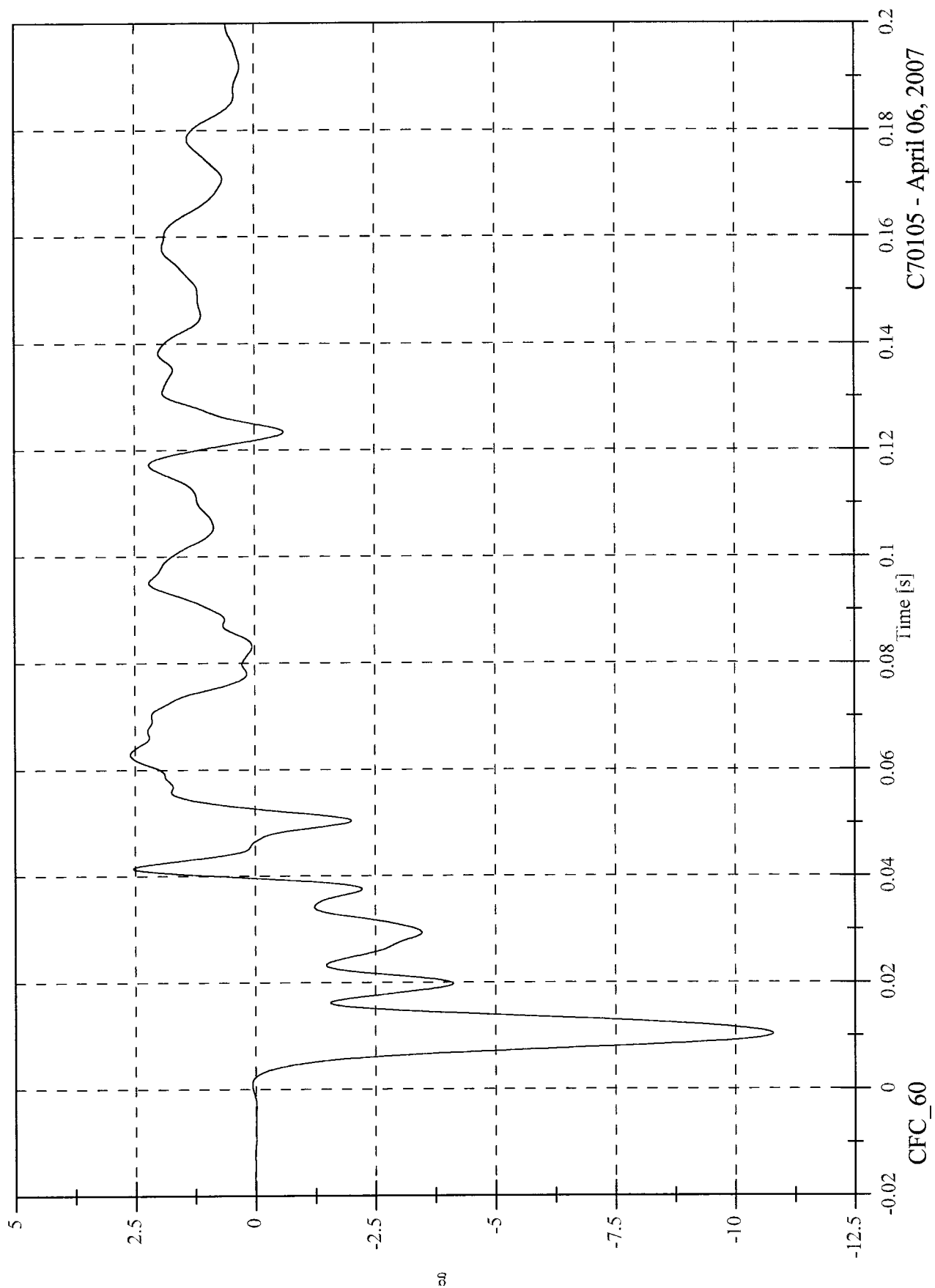


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V2 A1 Right Front Sill Z

Max: 2.6 [g] at 0.063 [s]
Min: -10.8 [g] at 0.010 [s]

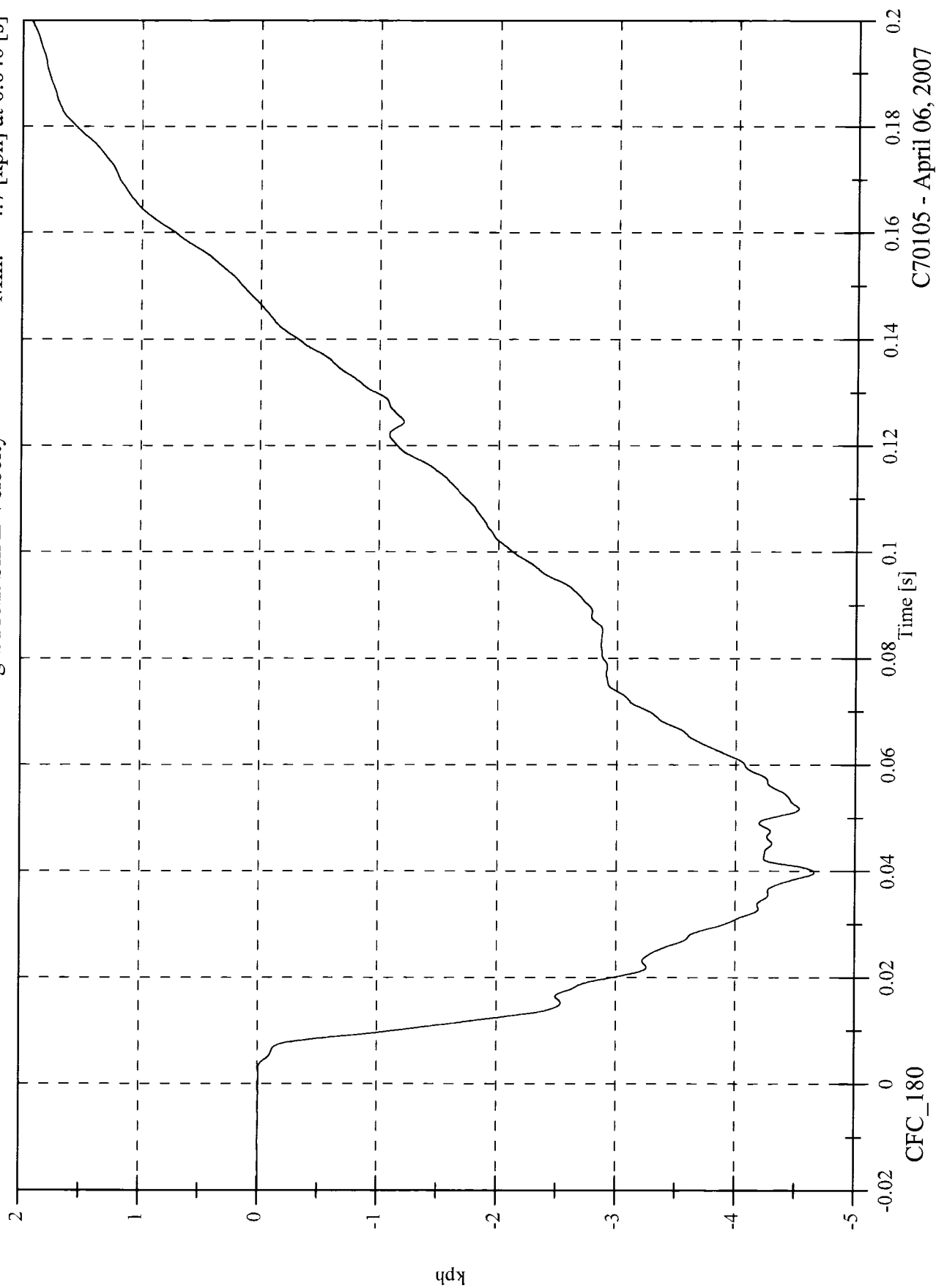


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V2 A1 Right Front Sill Z Velocity

Max: 1.9 [kph] at 0.200 [s]
Min: -4.7 [kph] at 0.040 [s]

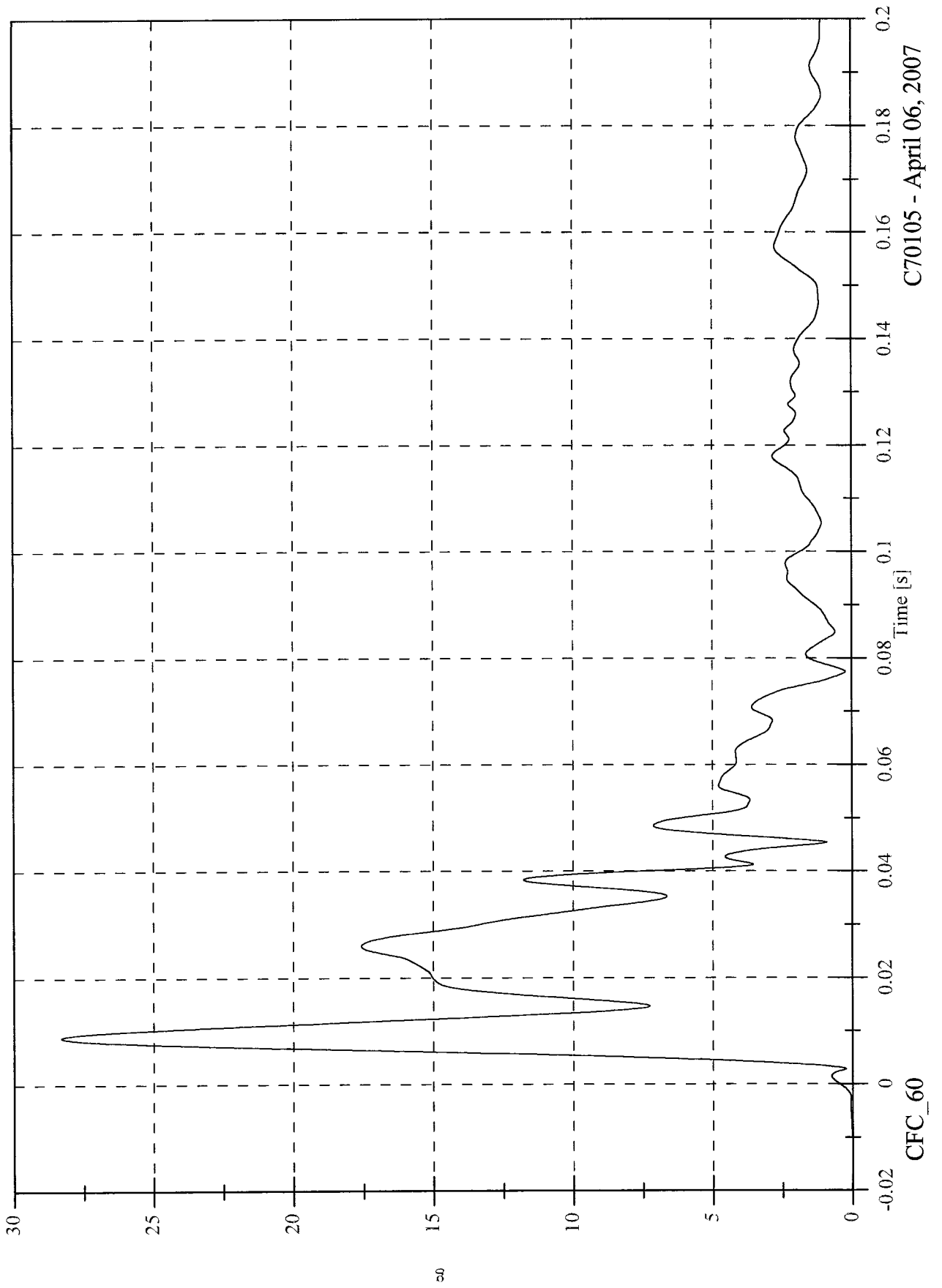


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V2 A1 Right Front Sill Resultant

Max: 28.3 [g] at 0.009 [s]
Min: 0.0 [g] at -0.014 [s]

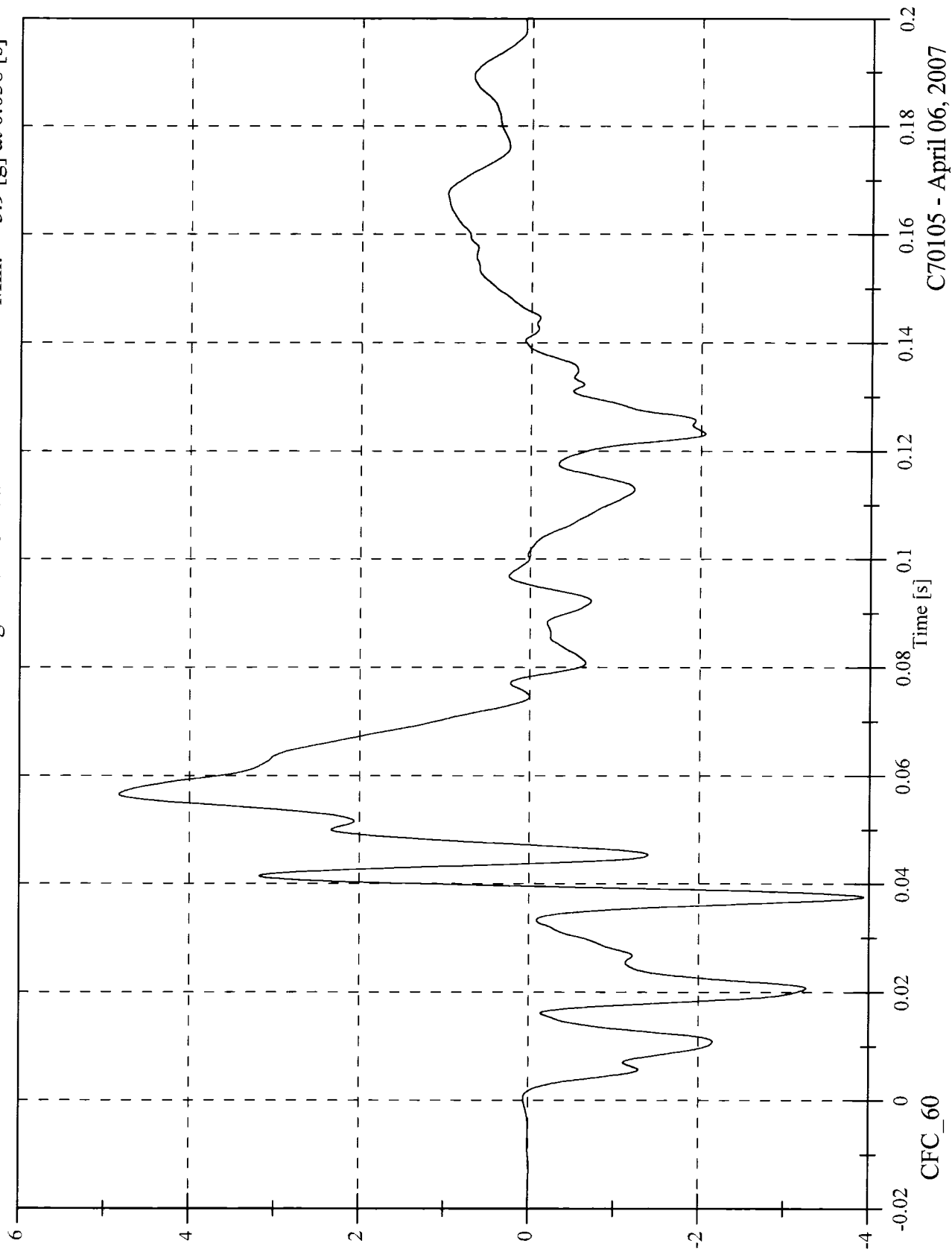


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V2 A2 Right Rear Sill X

Max: 4.8 [g] at 0.057 [s]
Min: -3.9 [g] at 0.038 [s]

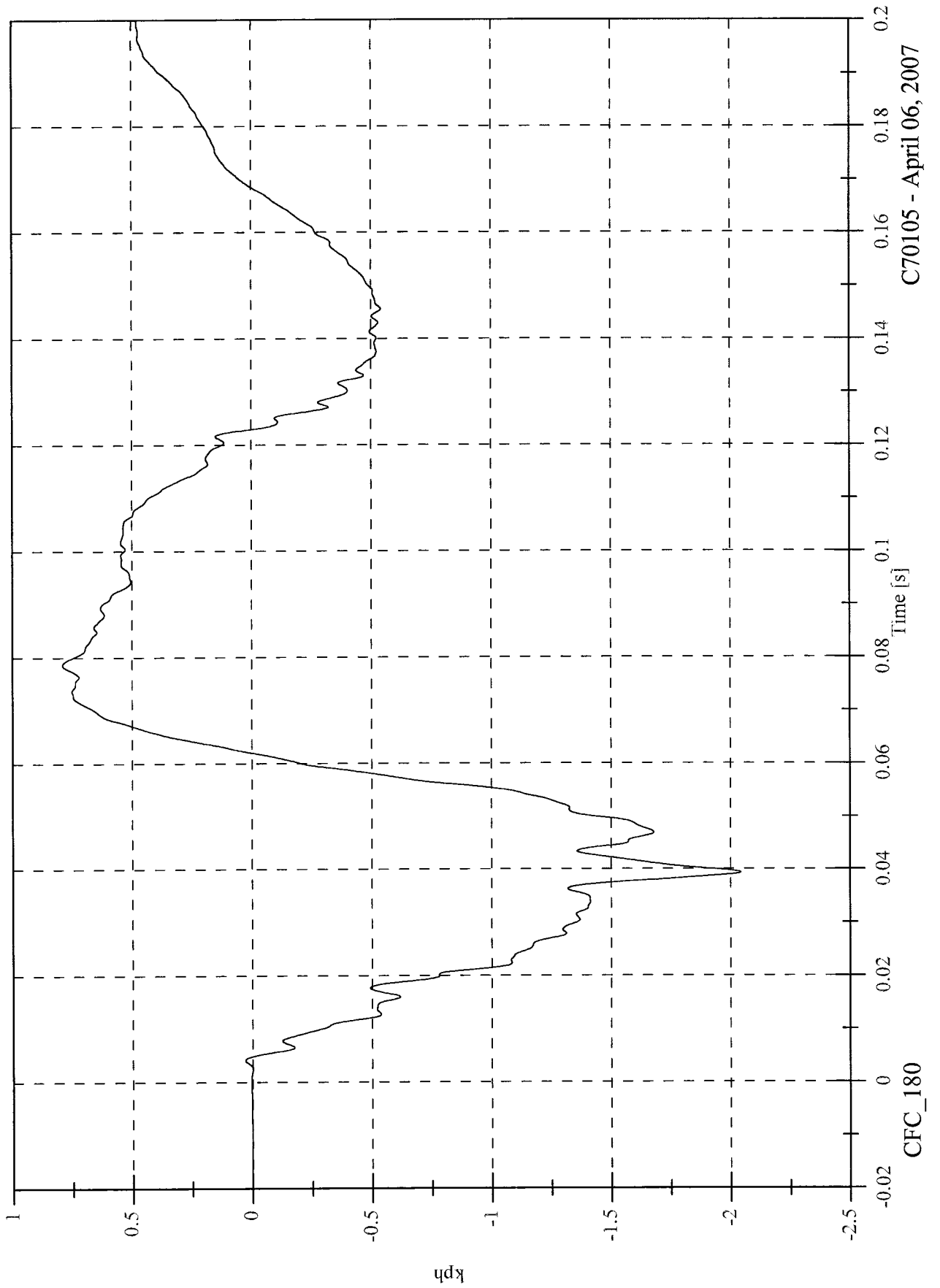


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Max: 0.8 [kph] at 0.079 [s]
Min: -2.0 [kph] at 0.039 [s]

V2 A2 Right Rear Sill X Velocity

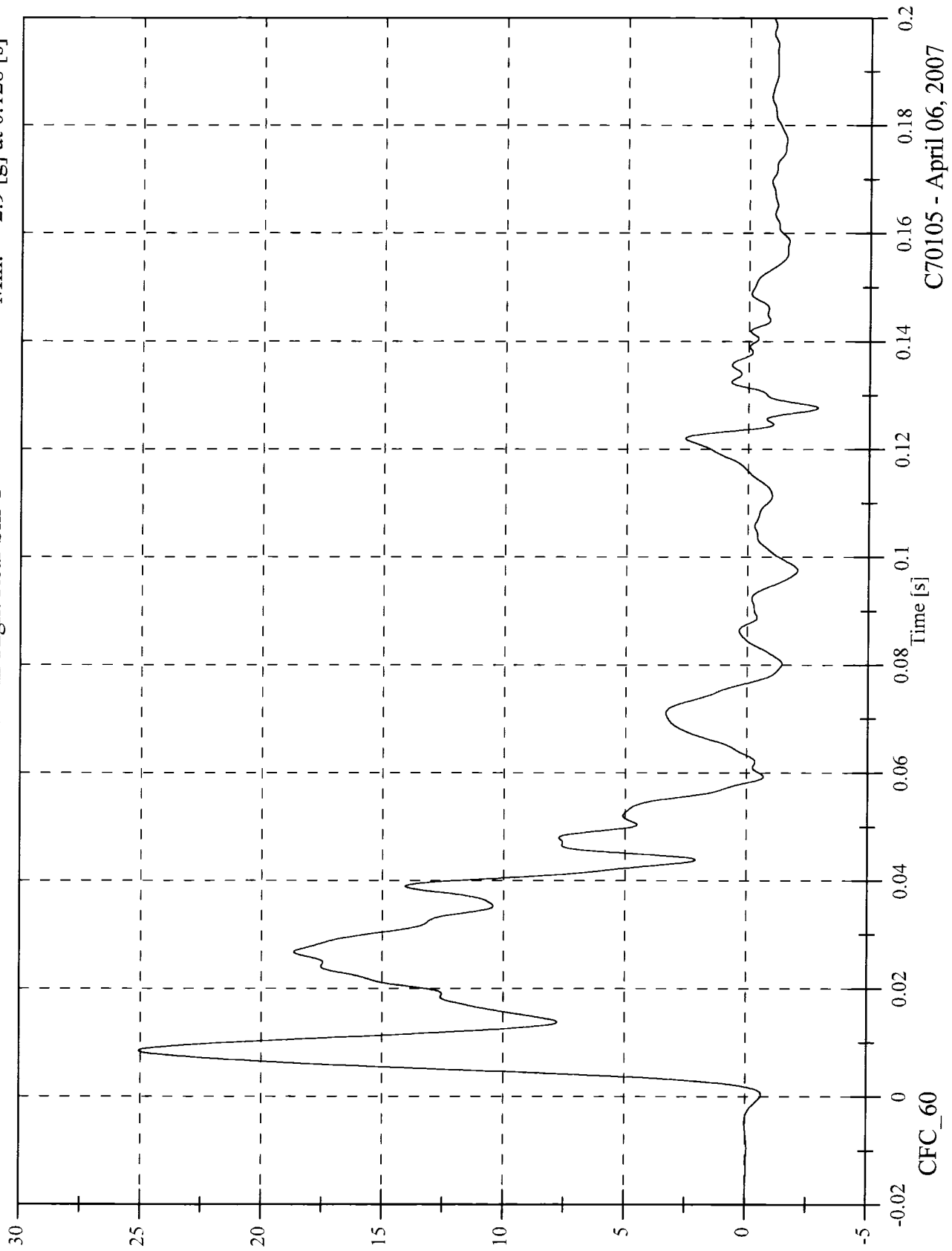


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V2 A2 Right Rear Sill Y

Max: 25.1 [g] at 0.009 [s]
Min: -2.9 [g] at 0.128 [s]

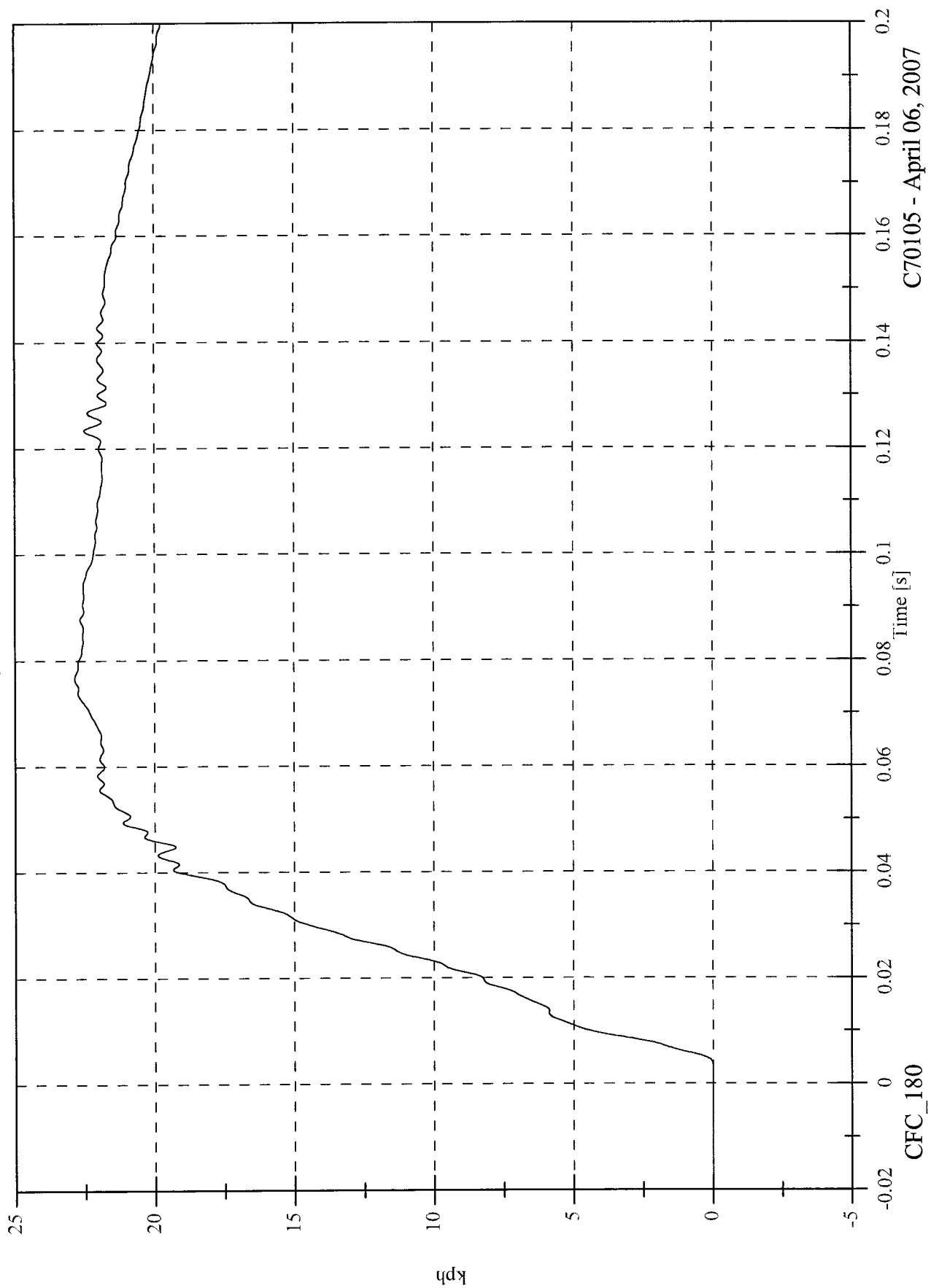


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Max: 22.9 [kph] at 0.077 [s]
Min: -0.0 [kph] at -0.006 [s]

V2 A2 Right Rear Sill Y Velocity

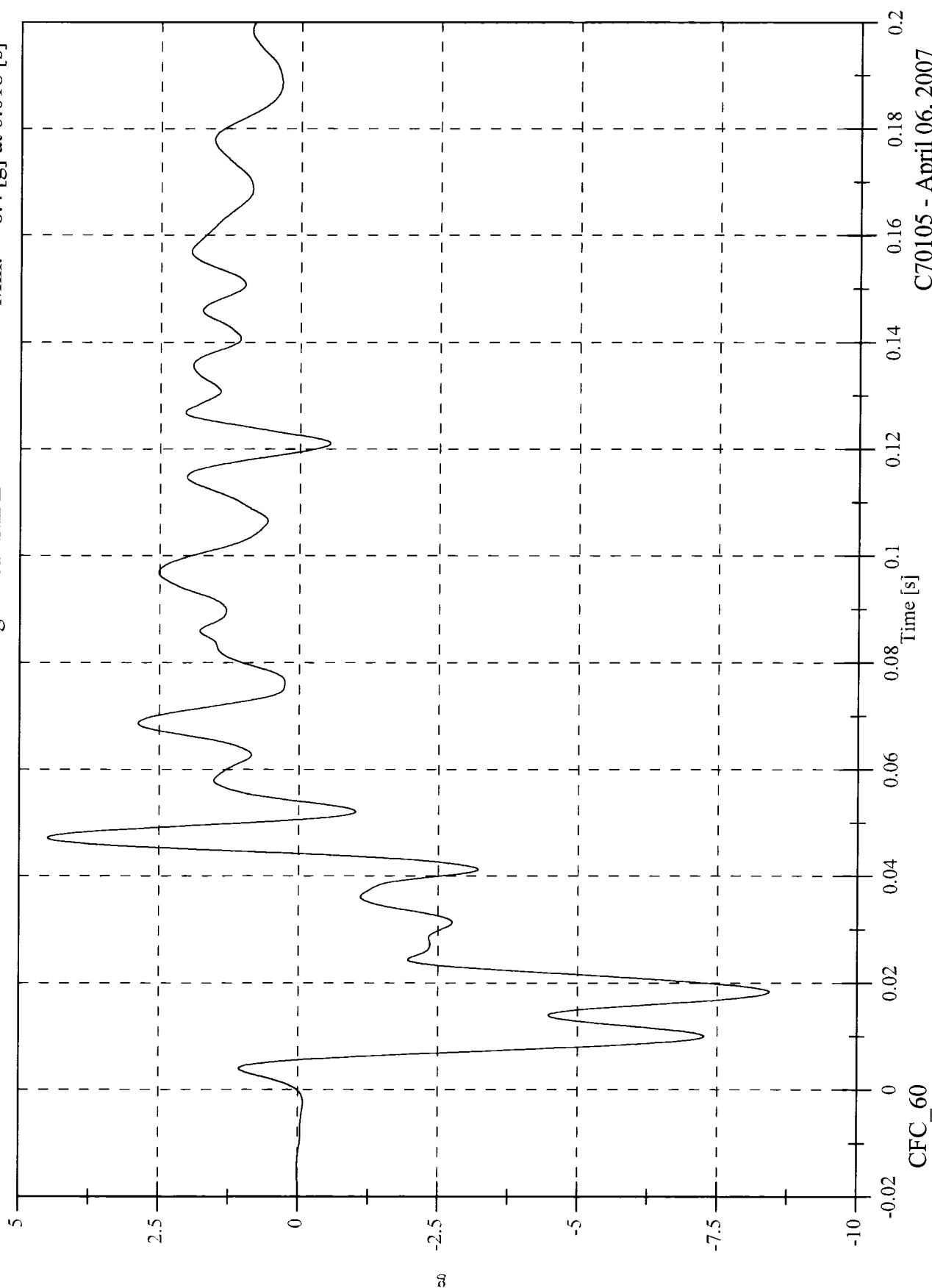


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V2 A2 Right Rear Sill Z

Max: 4.5 [g] at 0.047 [s]
Min: -8.4 [g] at 0.018 [s]

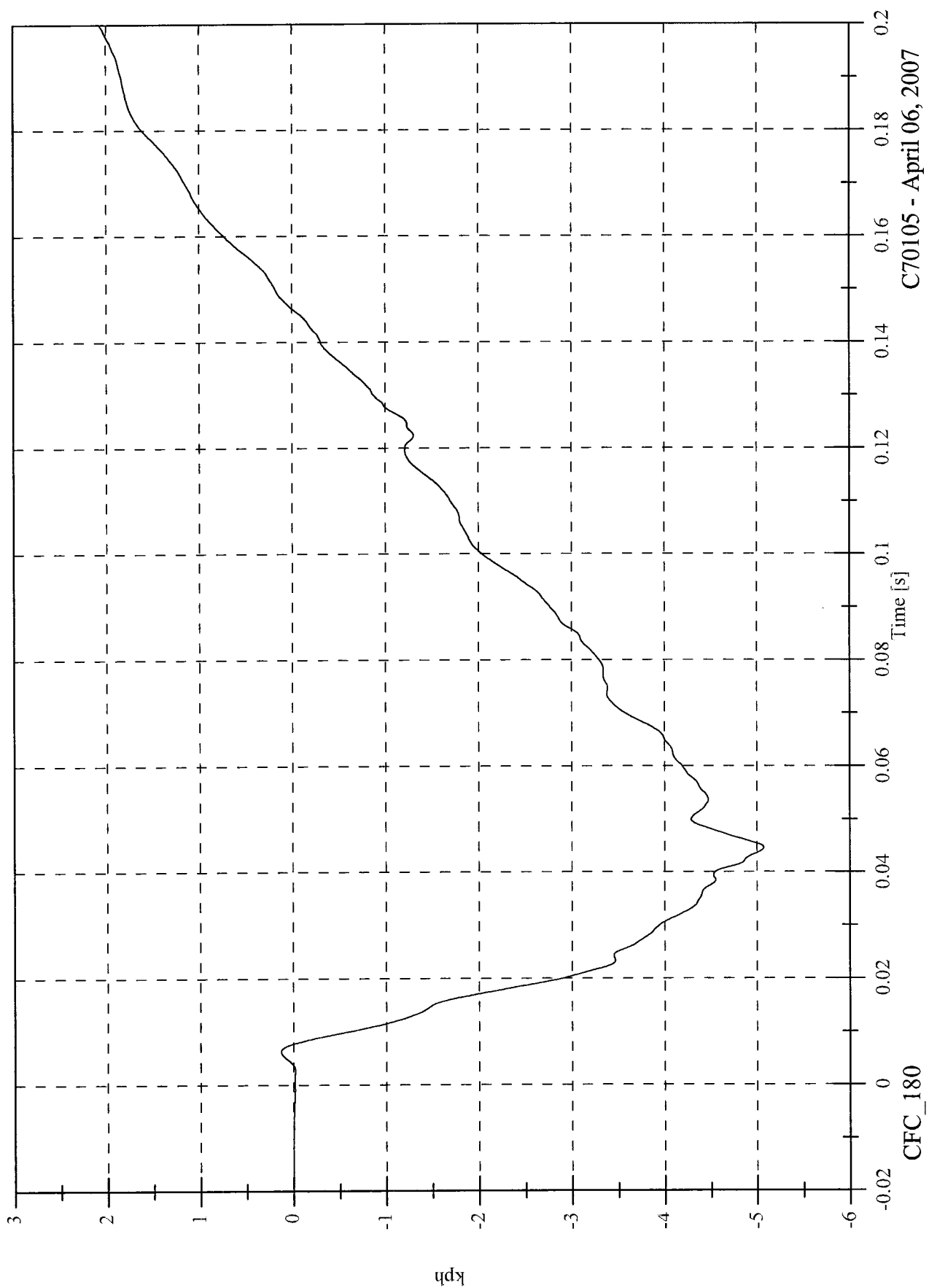


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Max: 2.1 [kph] at 0.200 [s]
Min: -5.1 [kph] at 0.045 [s]

V2 A2 Right Rear Sill Z Velocity

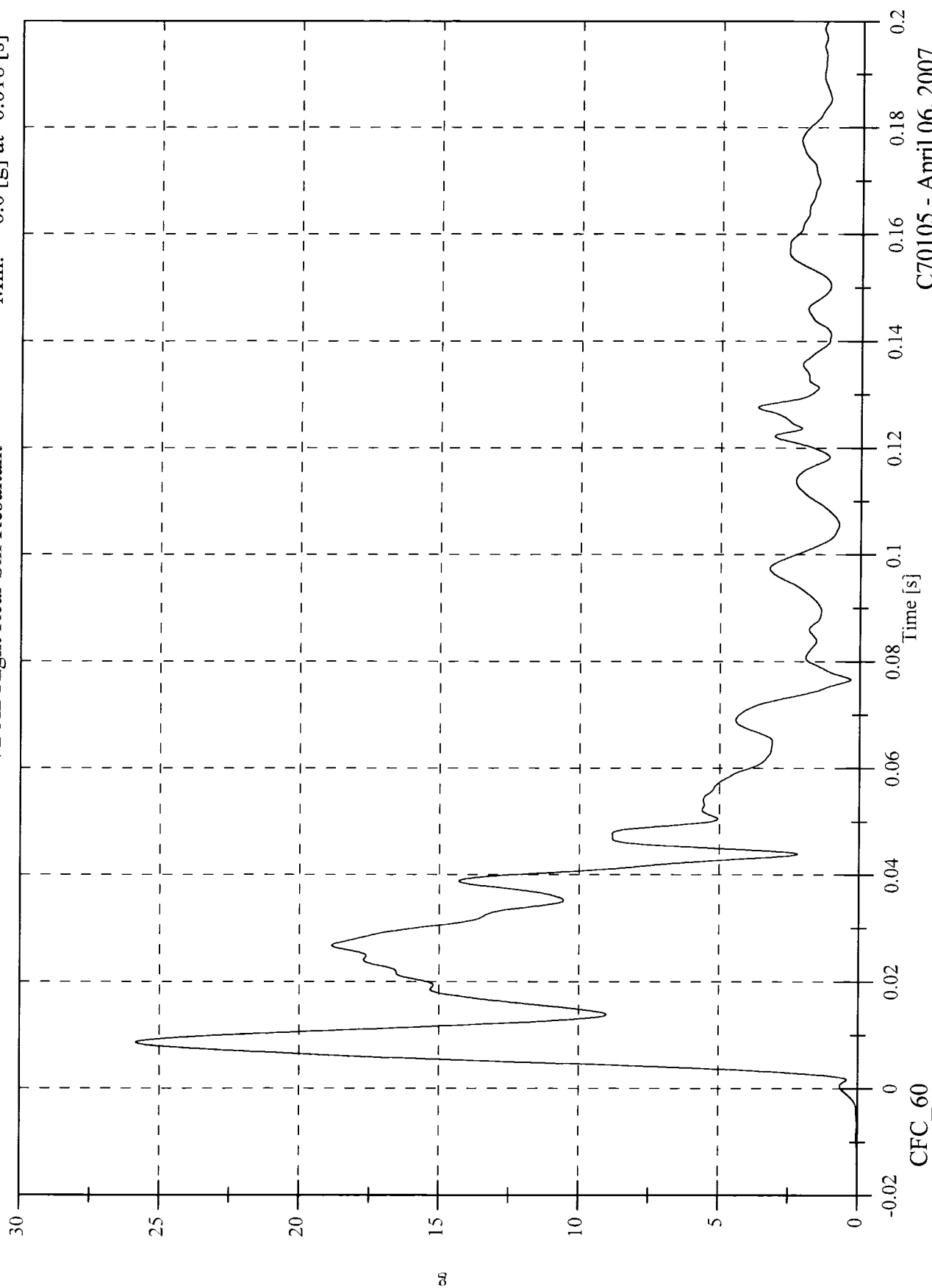


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V2 A2 Right Rear Sill Resultant

Max: 25.8 [g] at 0.009 [s]
Min: 0.0 [g] at -0.018 [s]

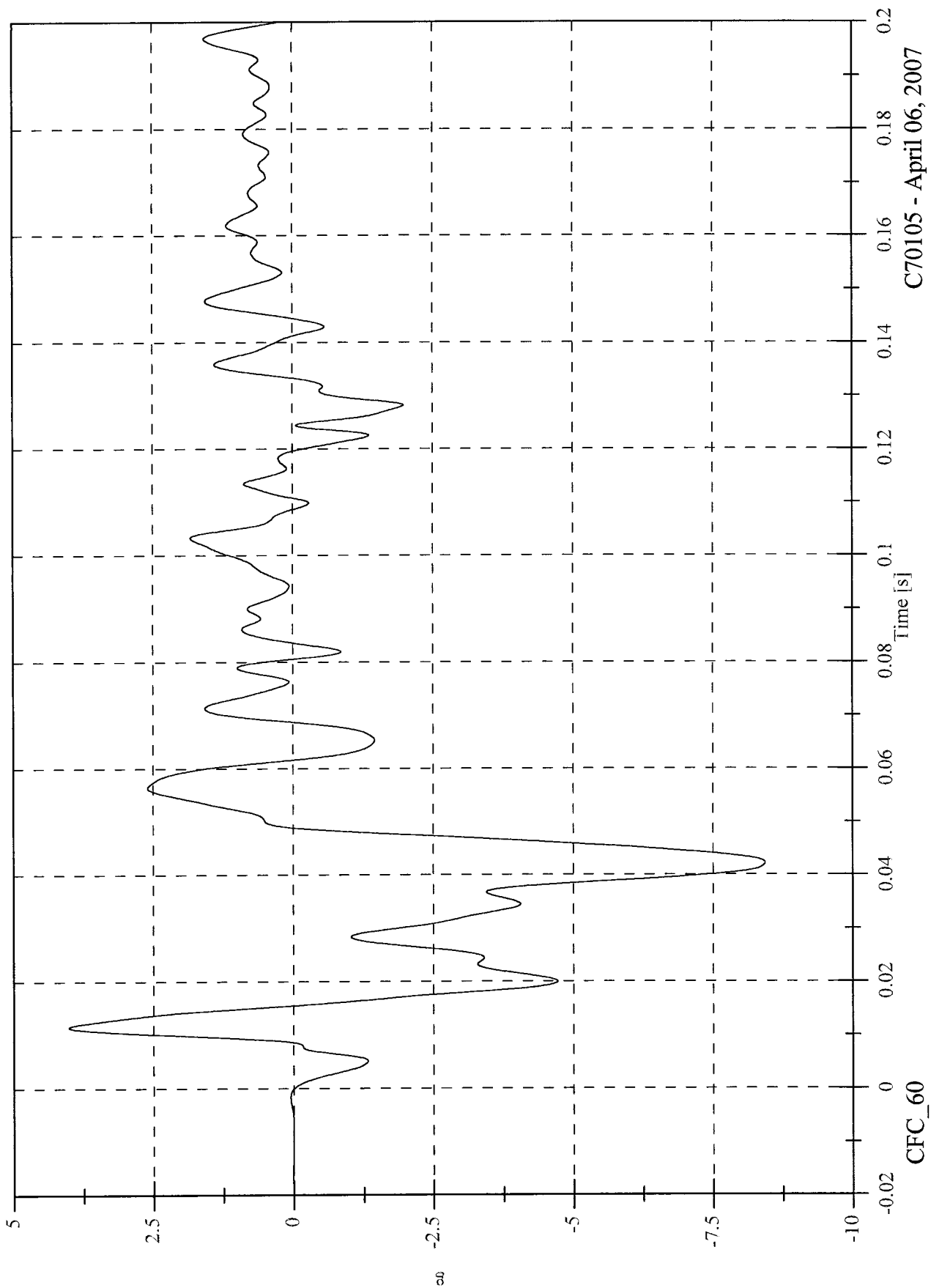


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V2 A3 Rear Floorpan X

Max: 4.0 [g] at 0.011 [s]
Min: -8.4 [g] at 0.042 [s]

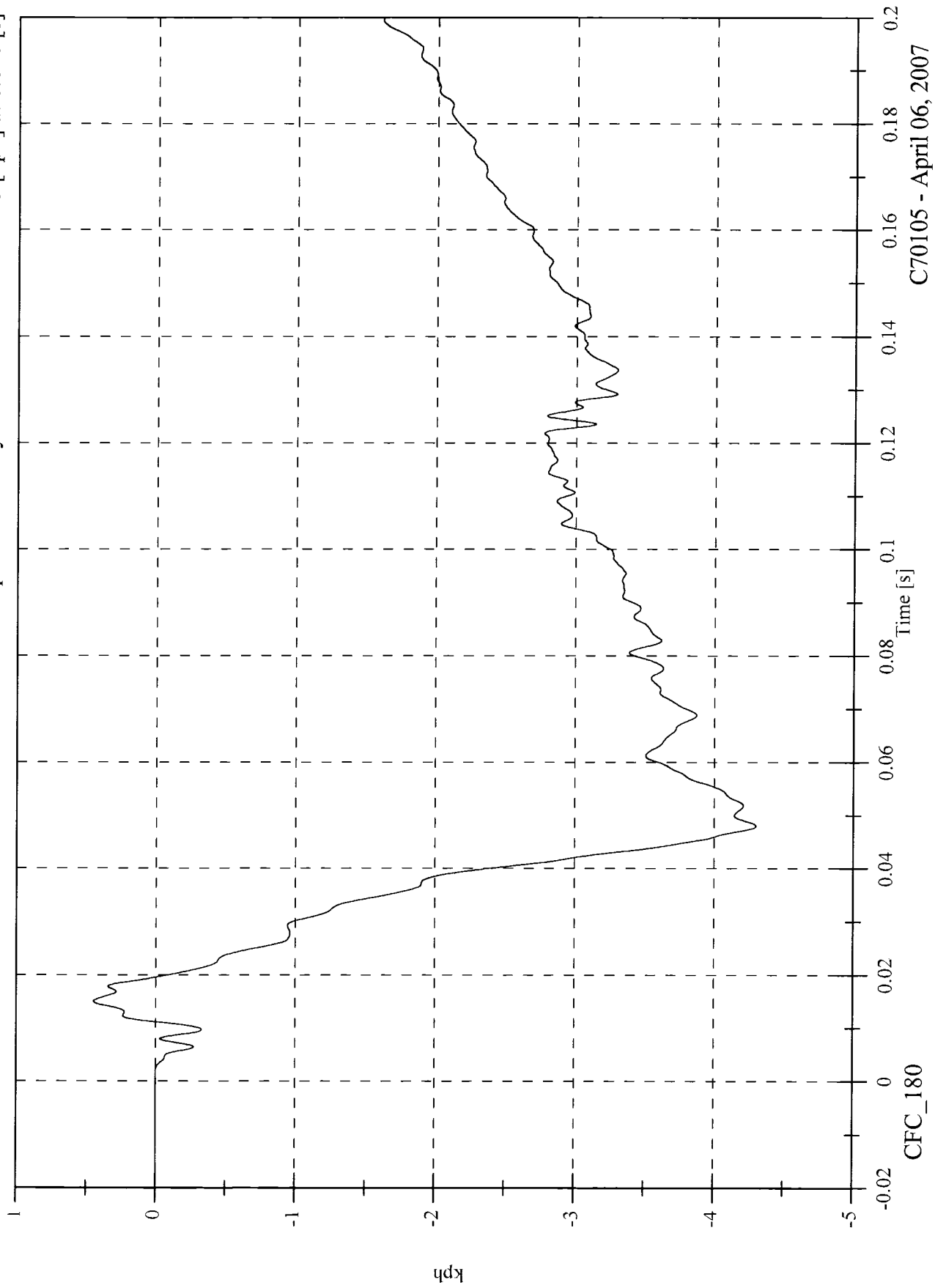


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V2 A3 Rear Floorpan X Velocity

Max: 0.4 [kph] at 0.015 [s]
Min: -4.3 [kph] at 0.048 [s]

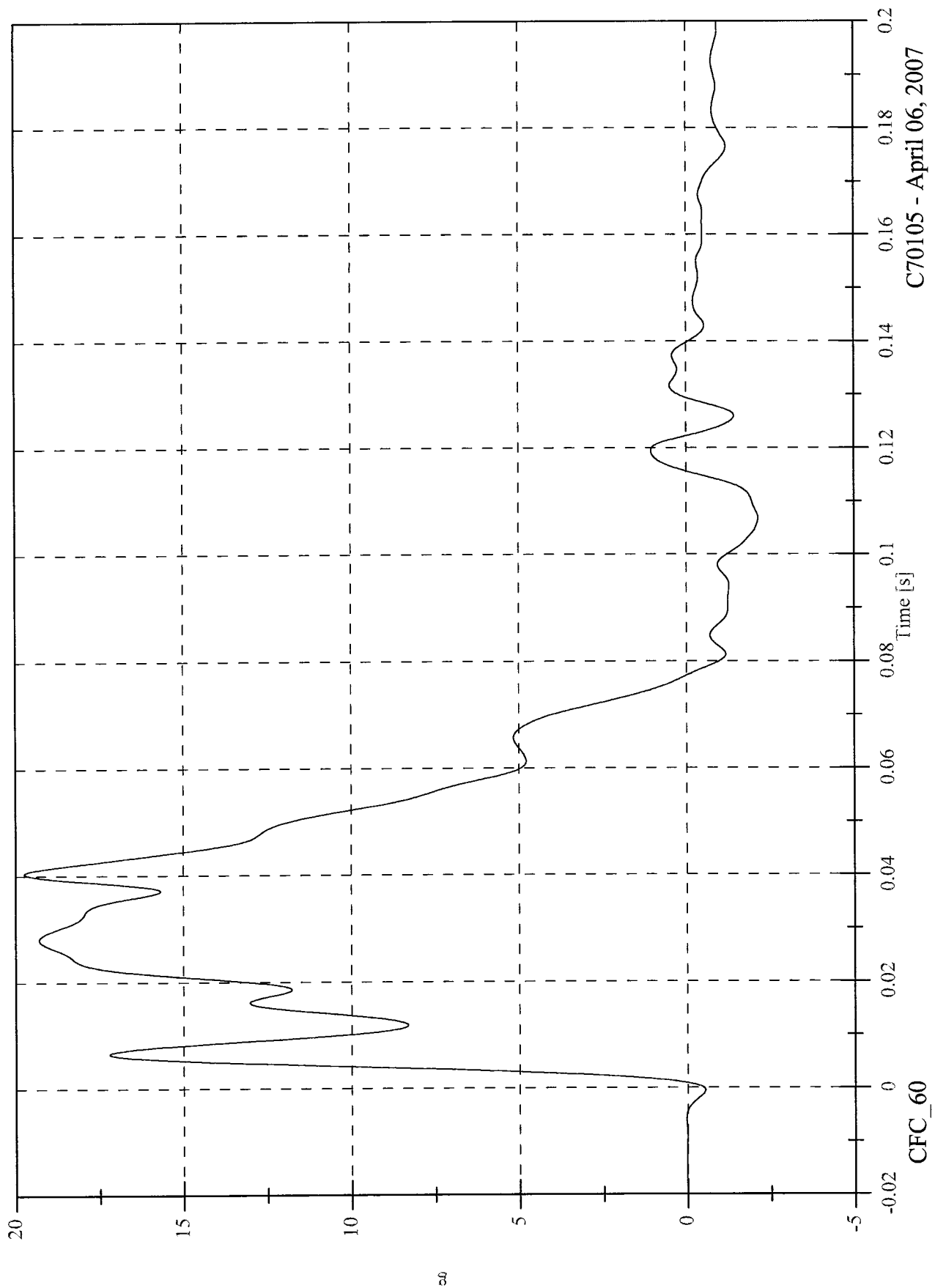


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V2 A3 Rear Floorpan Y

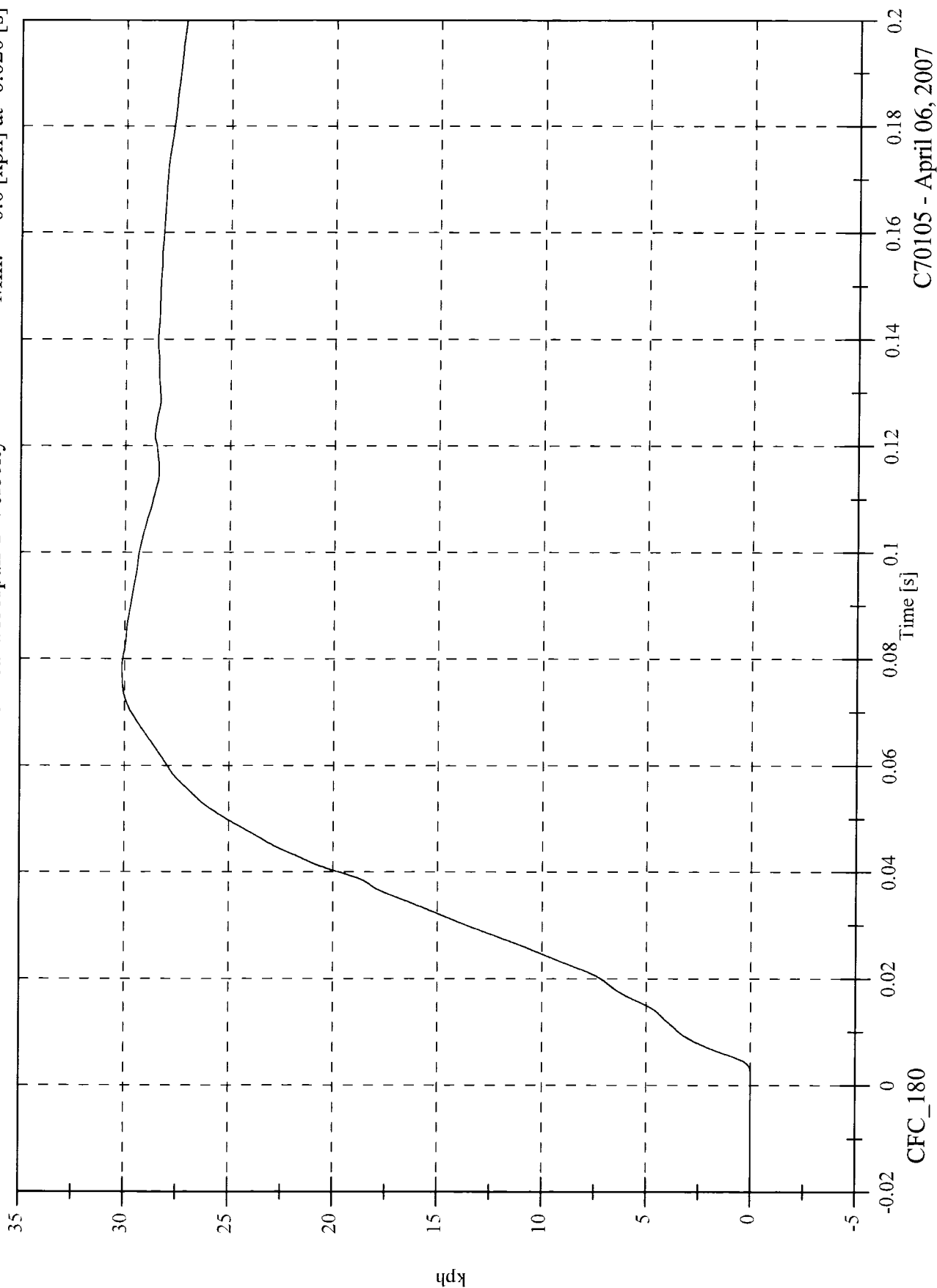
Max: 19.7 [g] at 0.040 [s]
Min: -2.1 [g] at 0.107 [s]



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V2 A3 Rear Floorpan Y Velocity

Max: 30.1 [kph] at 0.078 [s]
Min: -0.0 [kph] at -0.020 [s]

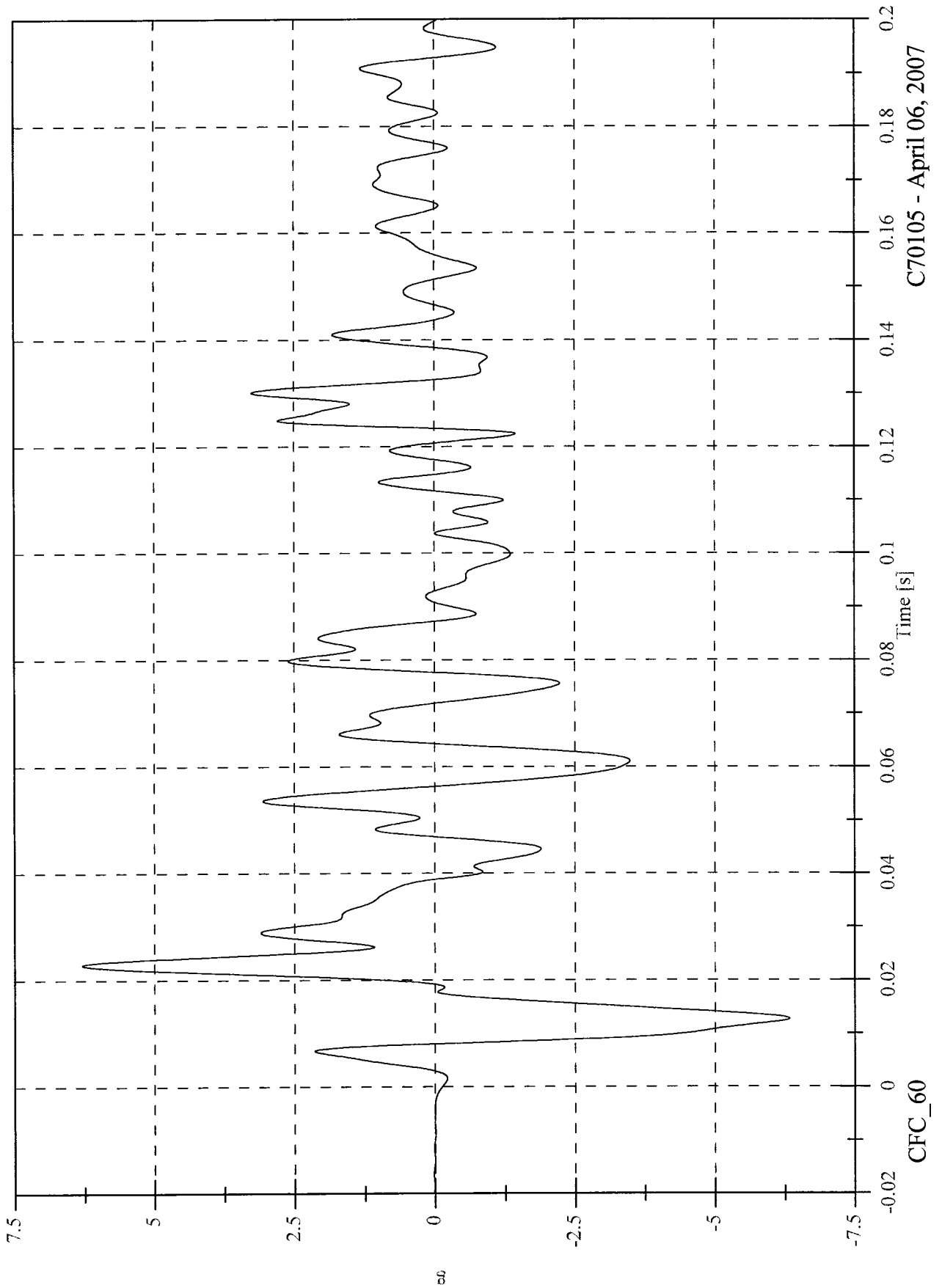


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V2 A3 Rear Floorpan Z

Max: 6.3 [g] at 0.023 [s]
Min: -6.3 [g] at 0.013 [s]

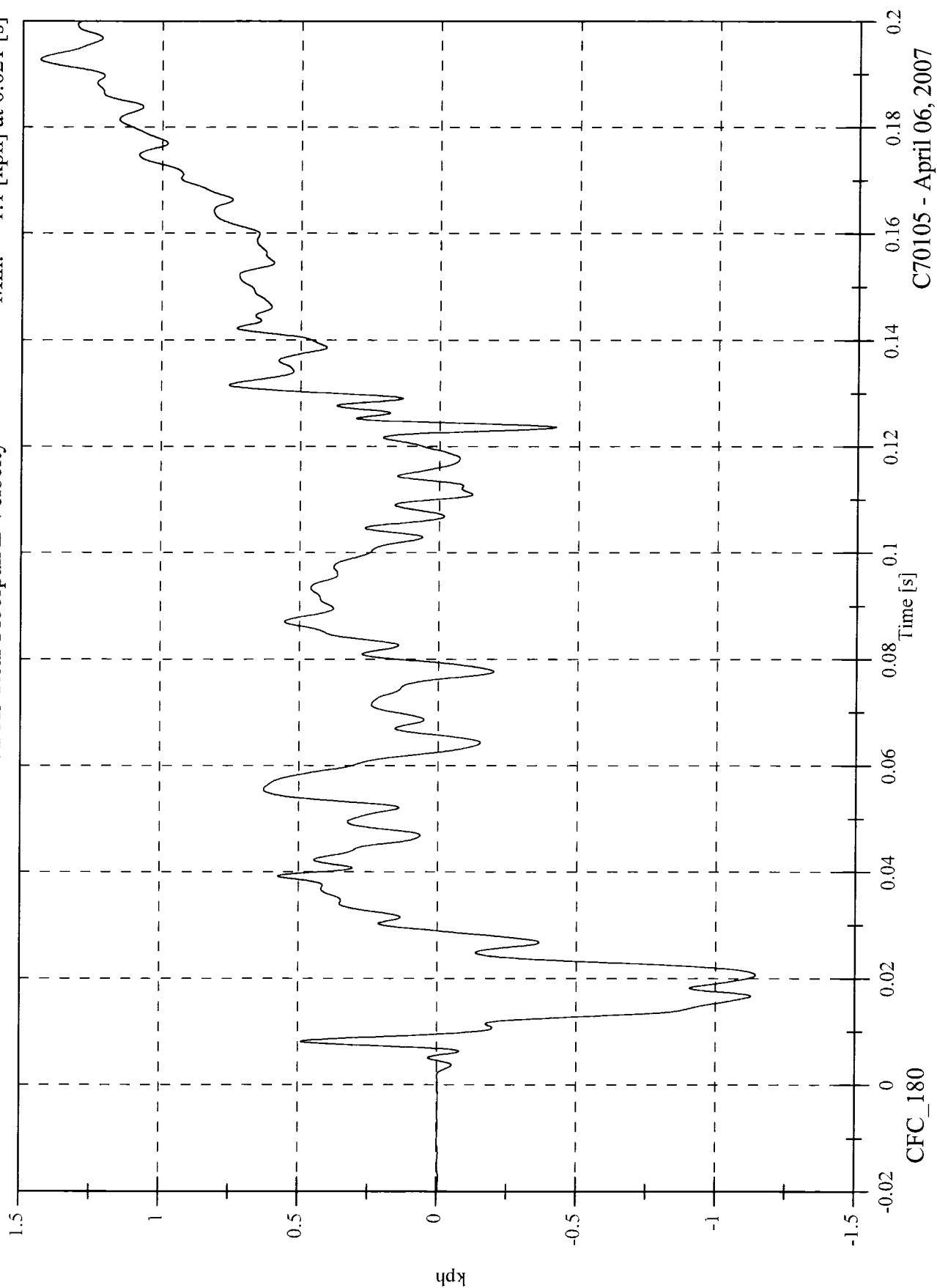


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V2 A3 Rear Floorpan Z Velocity

Max: 1.4 [kph] at 0.193 [s]
Min: -1.1 [kph] at 0.021 [s]

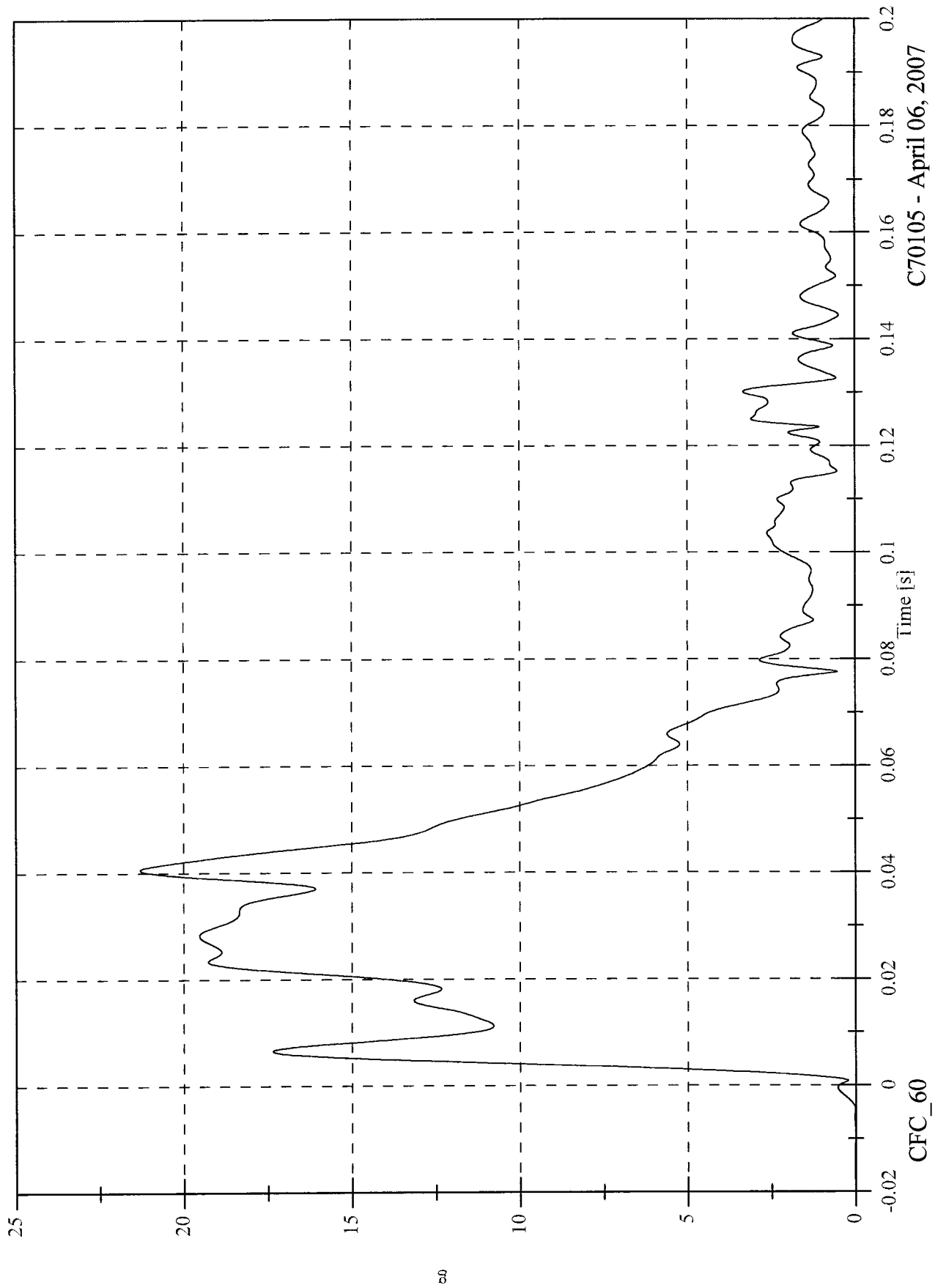


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V2 A3 Rear Floorpan Resultant

Max: 21.3 [g] at 0.041 [s]
Min: 0.0 [g] at -0.010 [s]

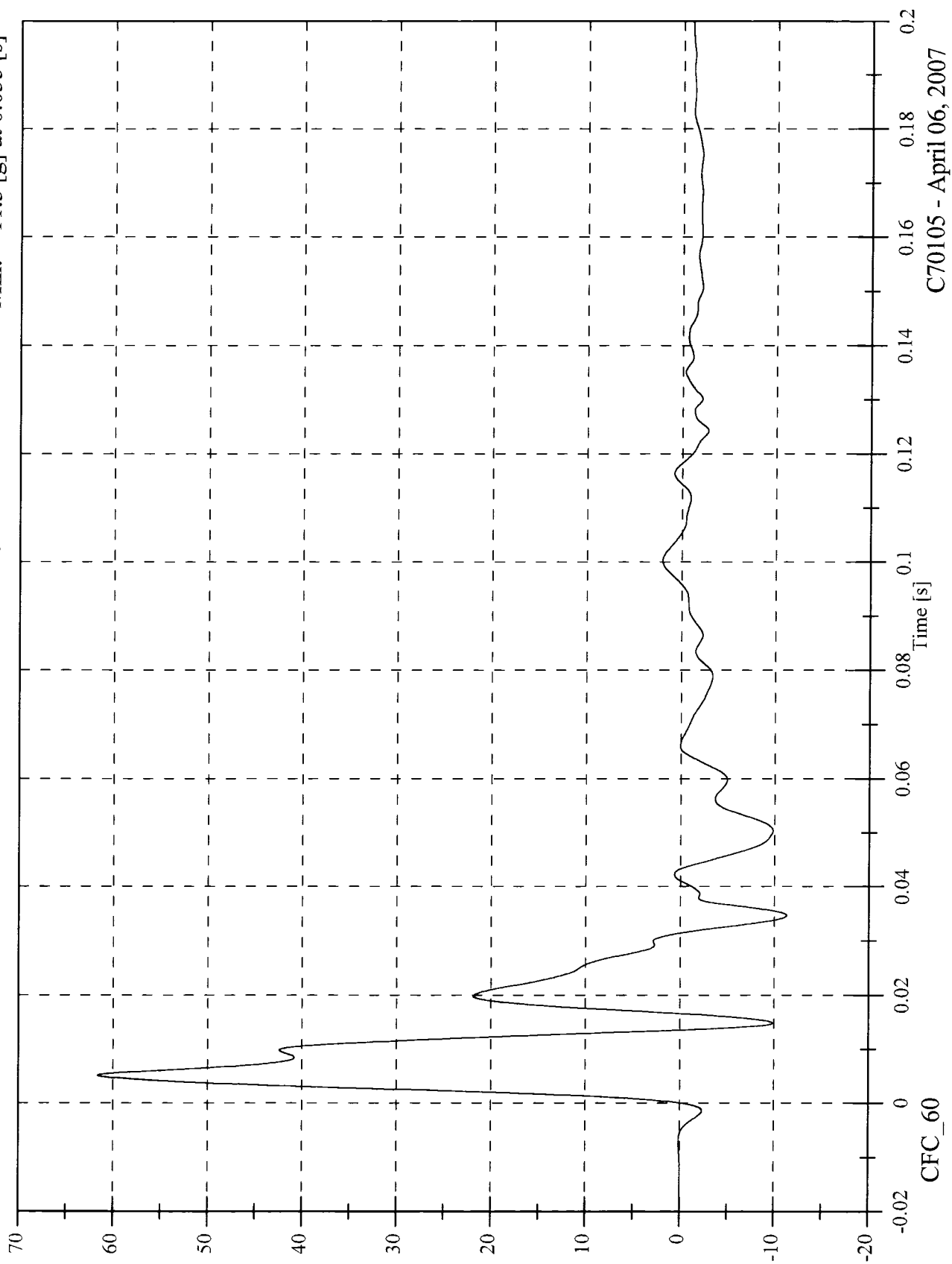


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V2 A4 Left Rear Sill Y

Max: 61.6 [g] at 0.005 [s]
Min: -11.3 [g] at 0.035 [s]

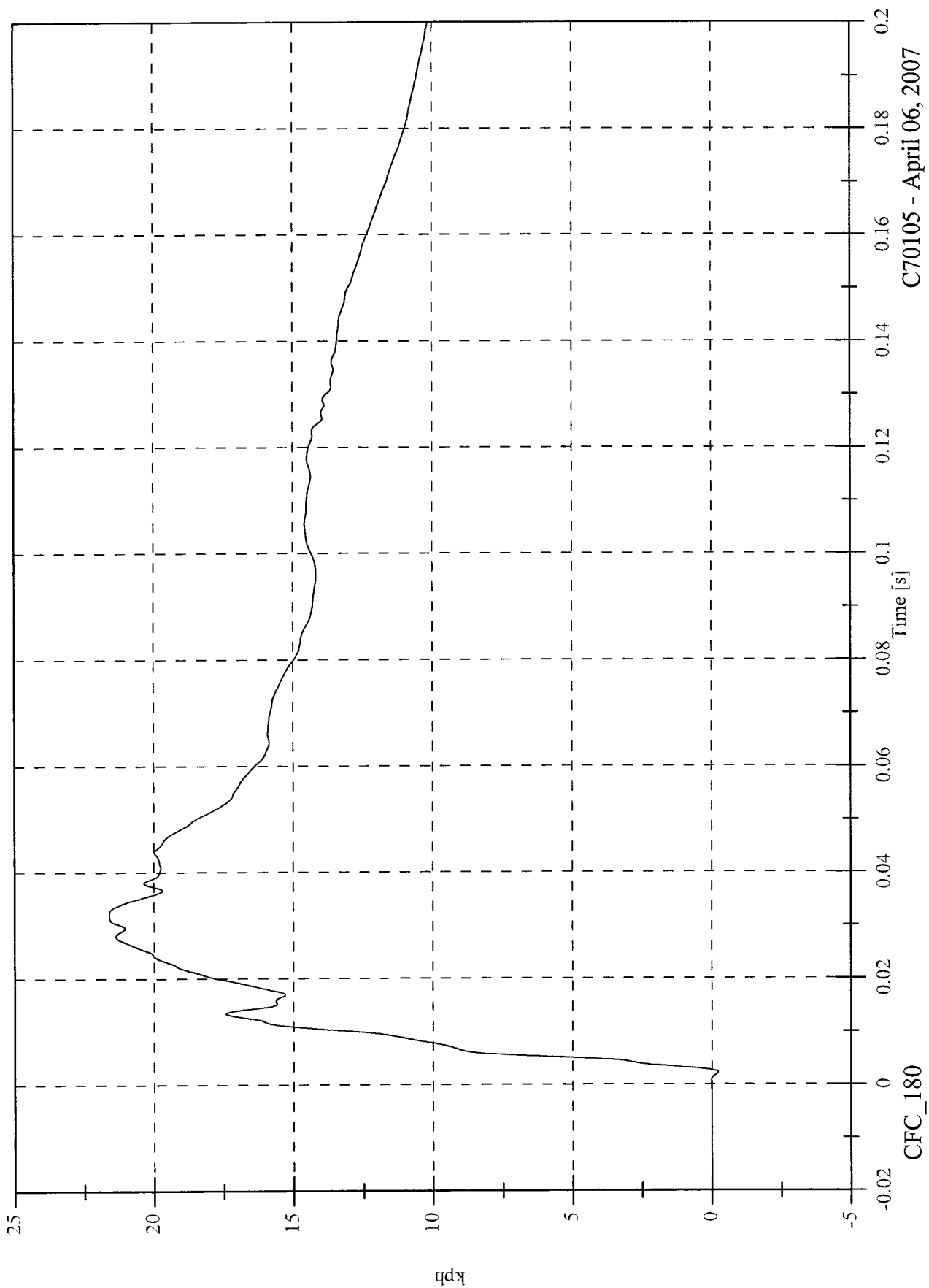


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V2 A4 Left Rear Sill Y Velocity

Max: 21.6 [kph] at 0.032 [s]
Min: -0.2 [kph] at 0.002 [s]



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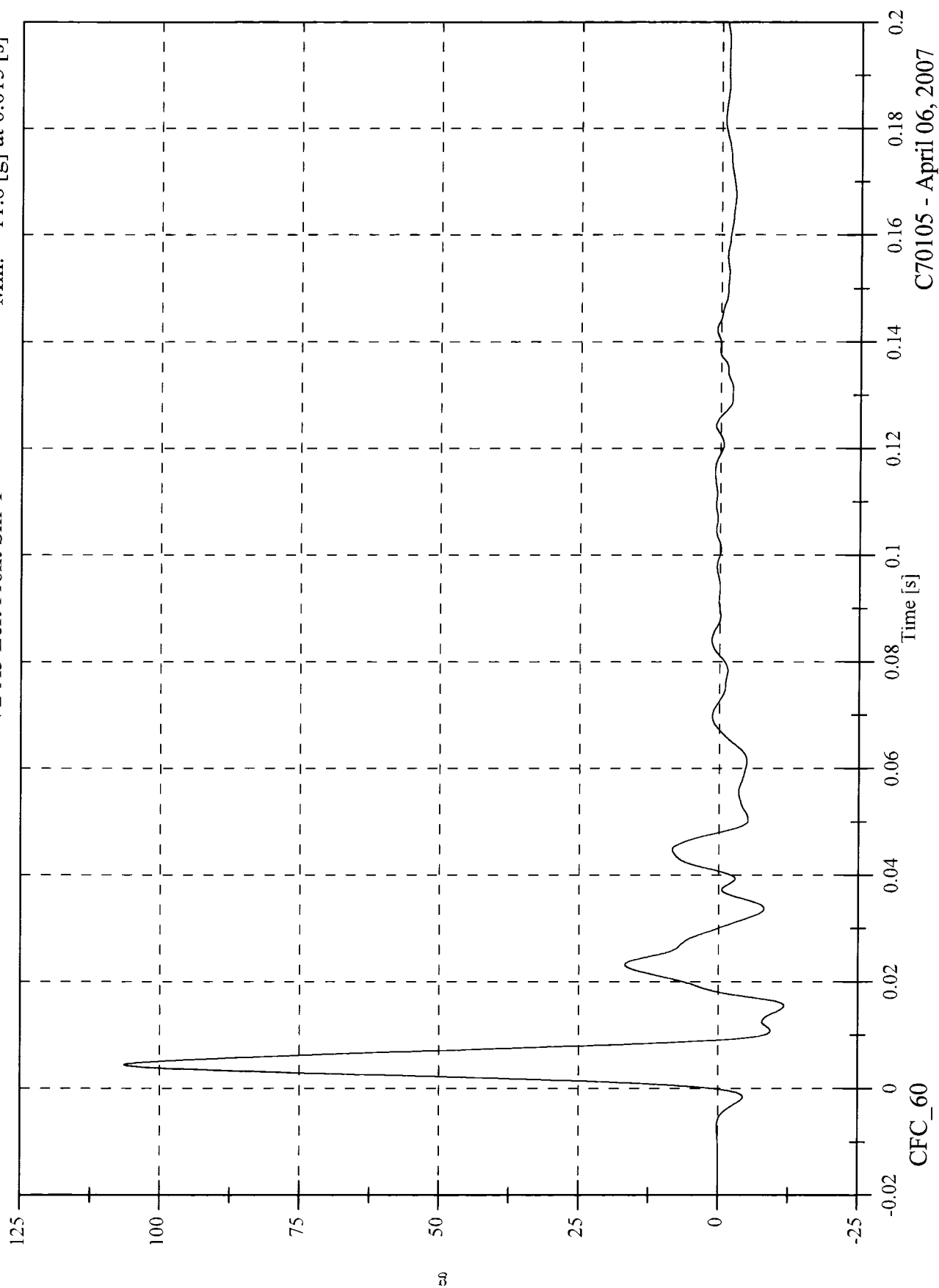
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CFC_180

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V2 A5 Left Front Sill Y

Max: 106.4 [g] at 0.004 [s]
Min: -11.8 [g] at 0.015 [s]

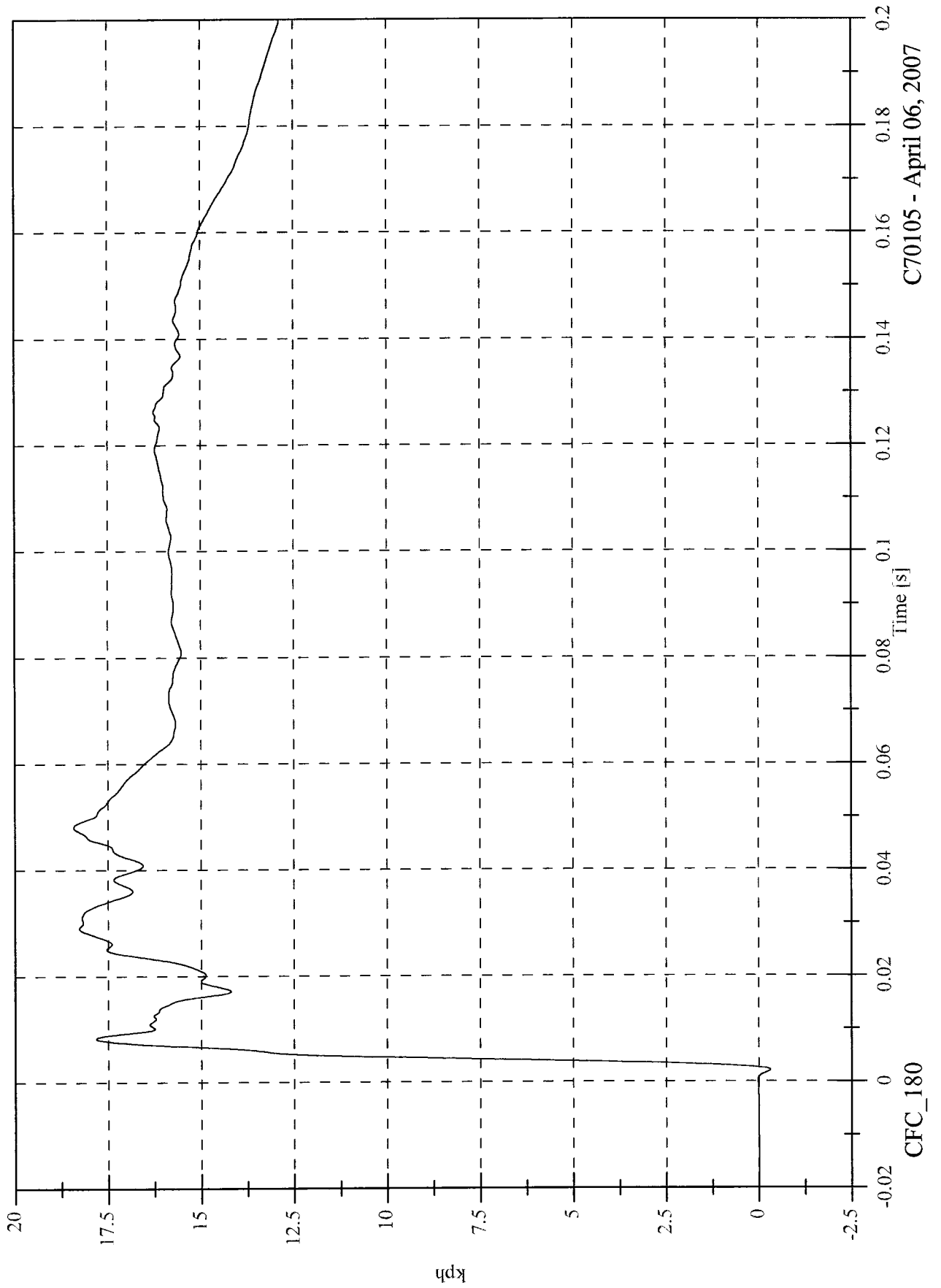


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Max: 18.4 [kph] at 0.048 [s]
Min: -0.3 [kph] at 0.002 [s]

V2 A5 Left Front Sill Y Velocity



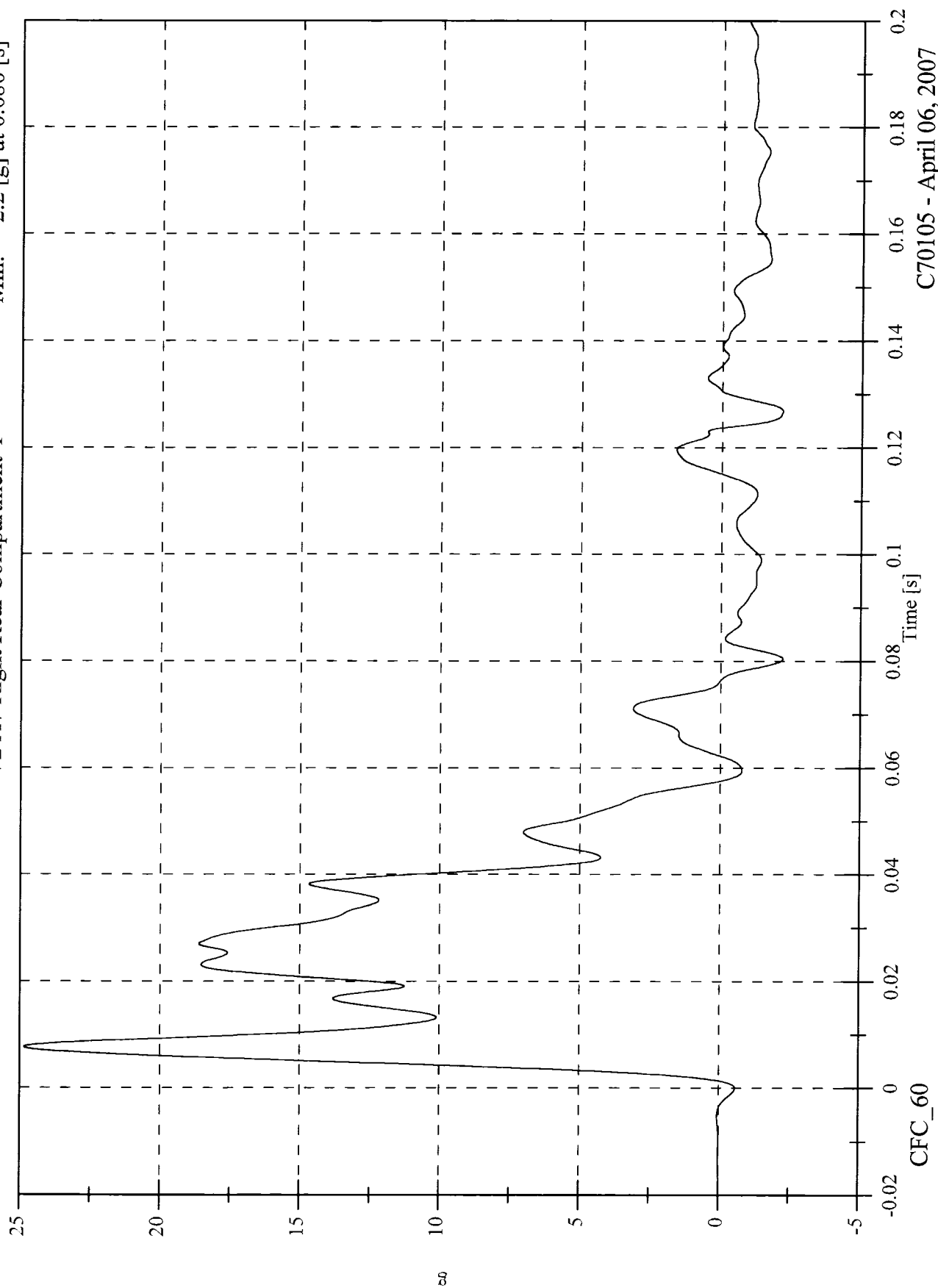
CFC_180

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V2 A7 Right Rear Compartment Y

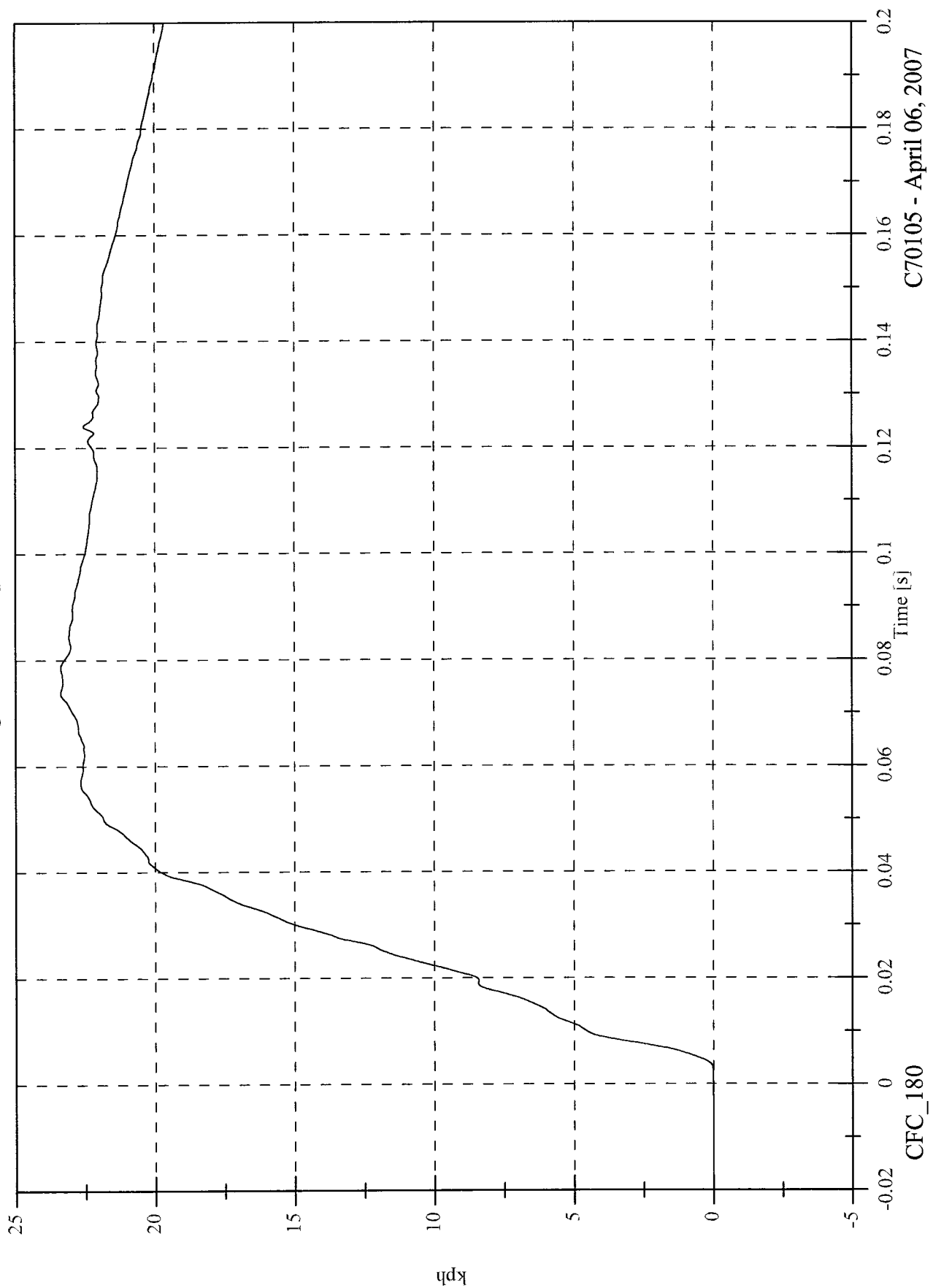
Max: 24.9 [g] at 0.008 [s]
Min: -2.2 [g] at 0.080 [s]



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V2 A7 Right Rear Compartment Y Velocity

Max: 23.4 [kph] at 0.078 [s]
Min: -0.0 [kph] at -0.018 [s]



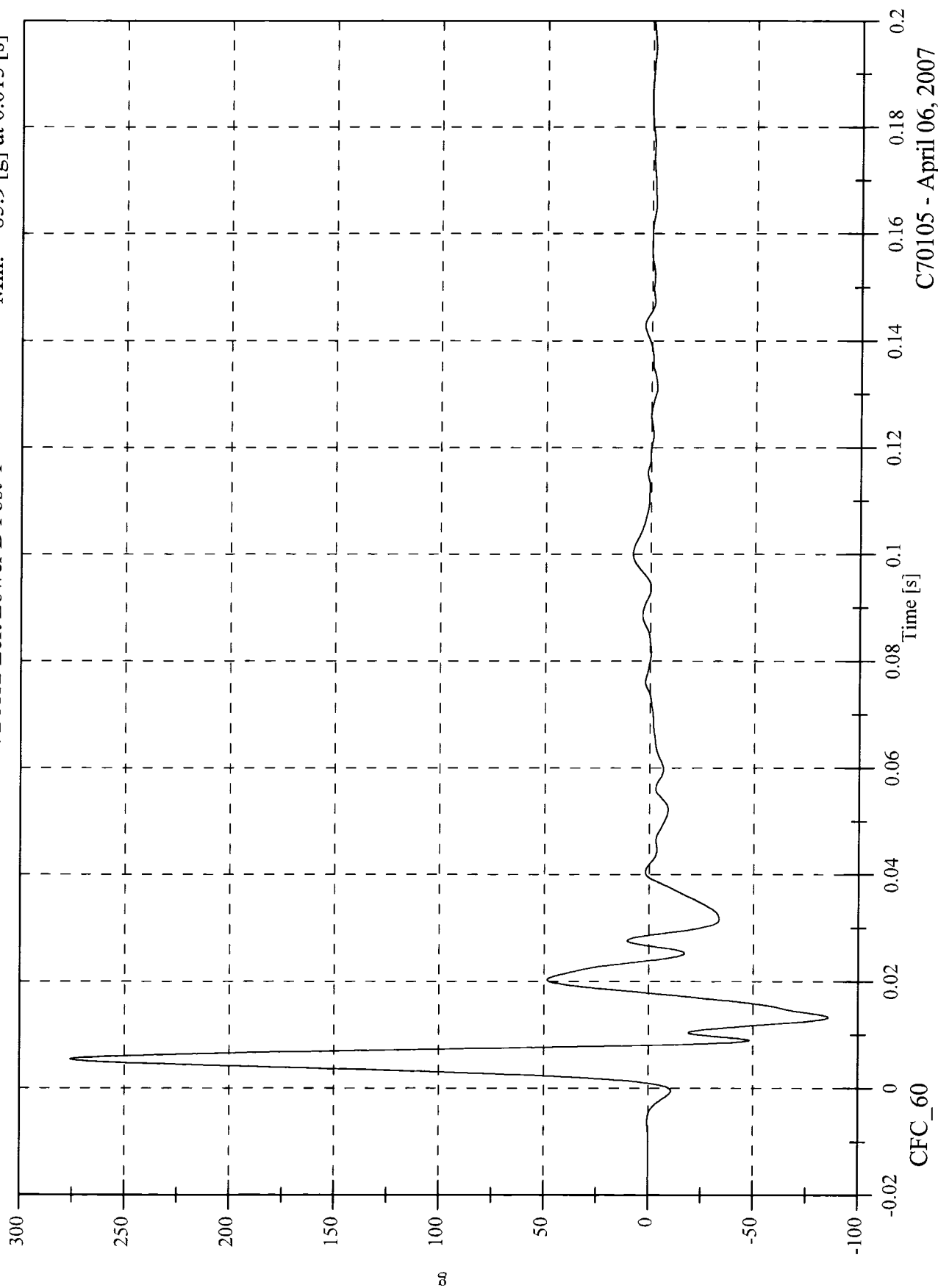
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CFC_180

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V2 A12 Left Lower B Post Y

Max: 275.9 [g] at 0.005 [s]
Min: -85.9 [g] at 0.013 [s]

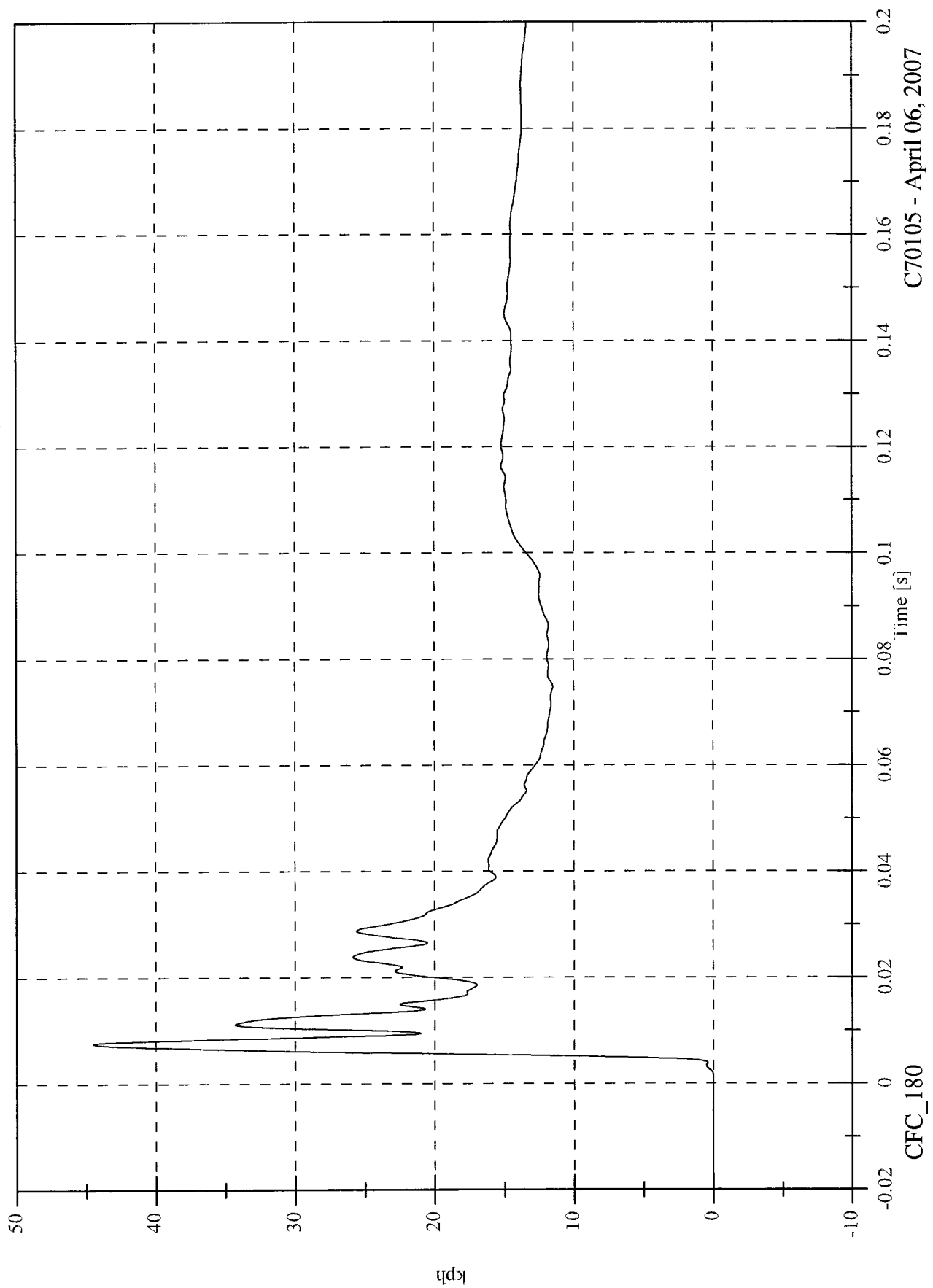


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Max: 44.5 [kph] at 0.008 [s]
Min: -0.0 [kph] at -0.019 [s]

V2 A12 Left Lower B Post Y Velocity

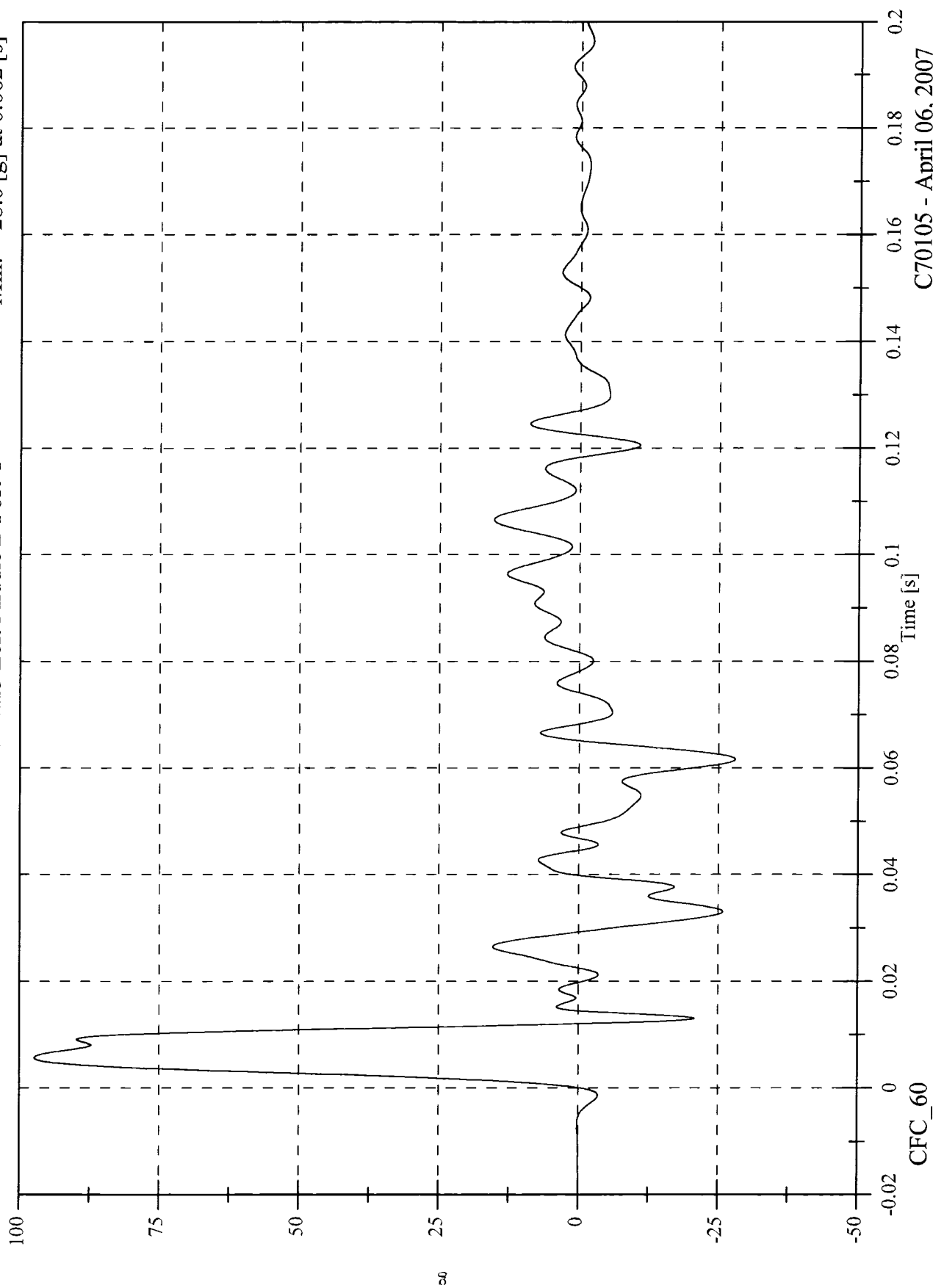


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V2 A13 Left Middle B Post Y

Max: 97.4 [g] at 0.006 [s]
Min: -28.0 [g] at 0.062 [s]

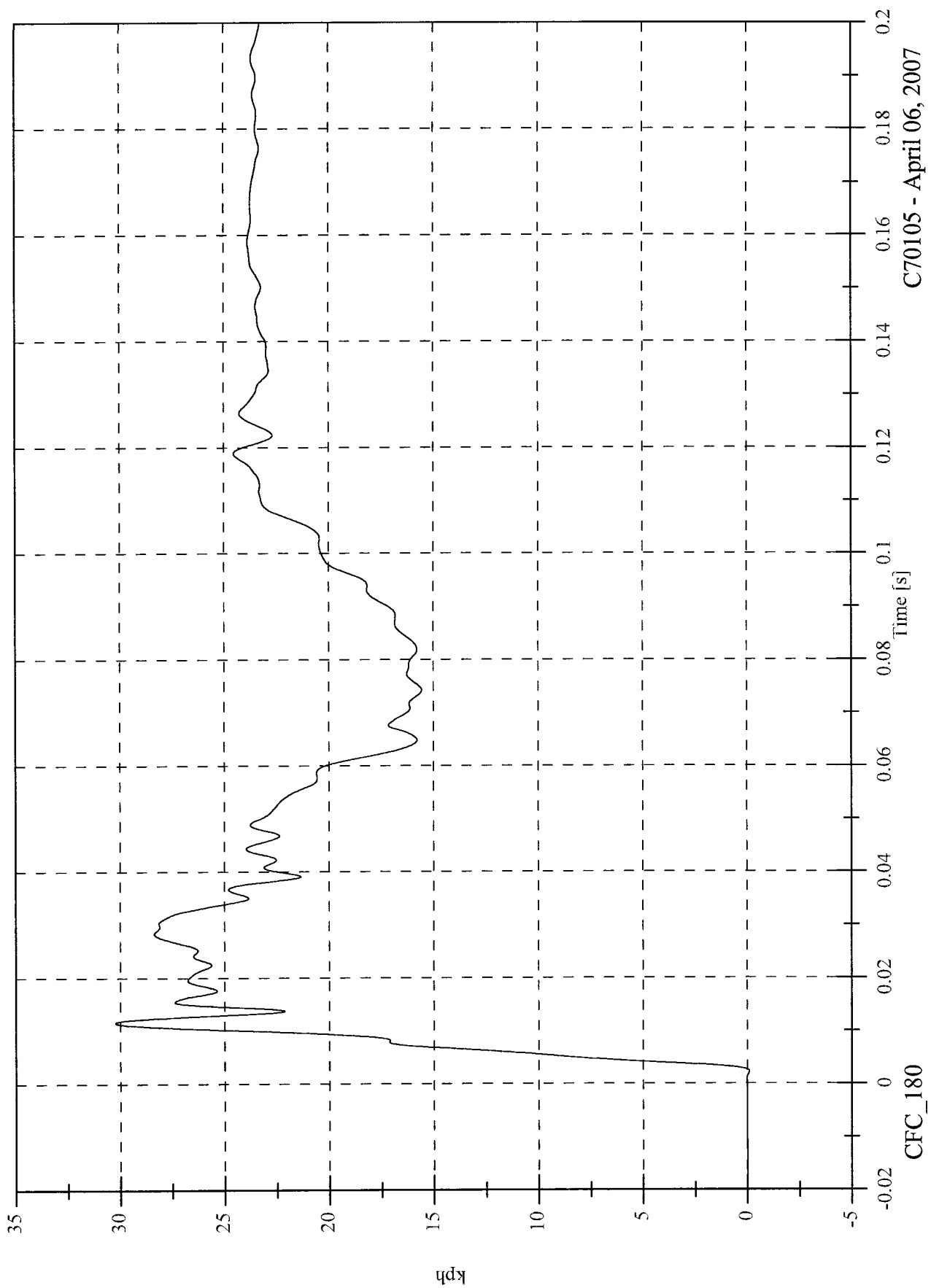


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V2 A13 Left Middle B Post Y Velocity

Max: 30.2 [kph] at 0.012 [s]
Min: -0.1 [kph] at 0.002 [s]

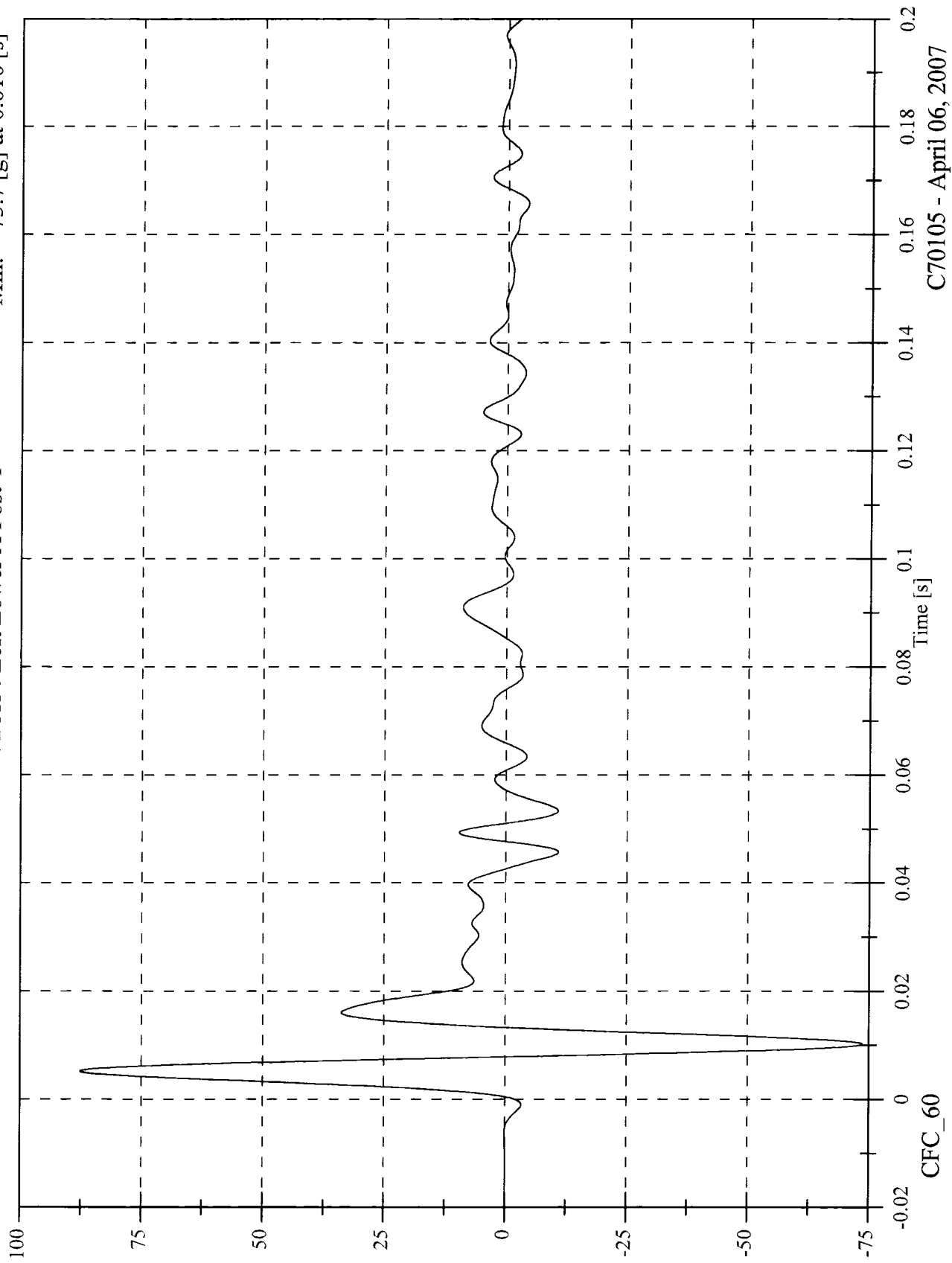


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V2 A14 Left Lower A Post Y

Max: 87.6 [g] at 0.005 [s]
Min: -73.7 [g] at 0.010 [s]

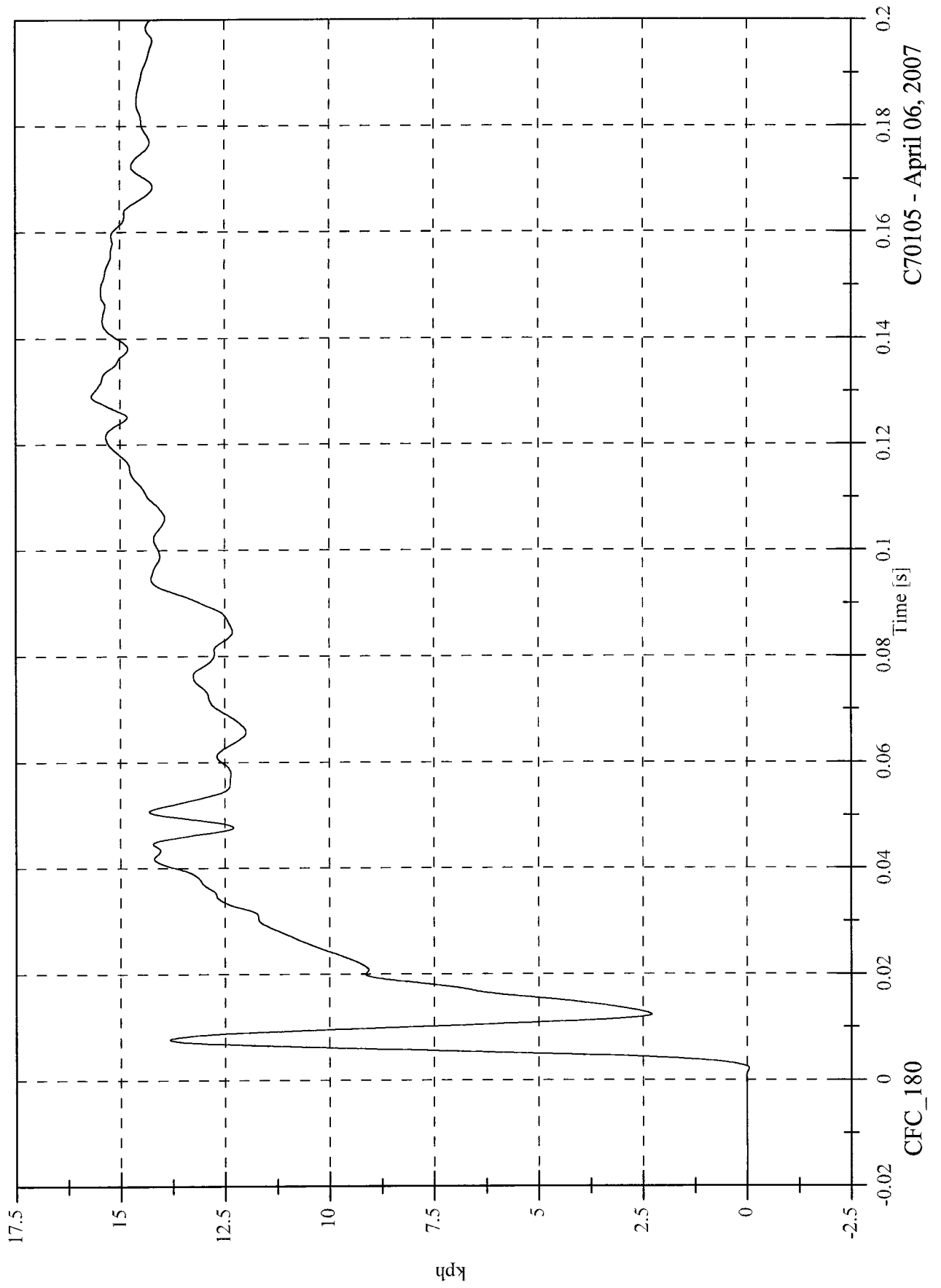


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Max: 15.7 [kph] at 0.129 [s]
Min: -0.0 [kph] at 0.002 [s]

V2 A14 Left Lower A Post Y Velocity

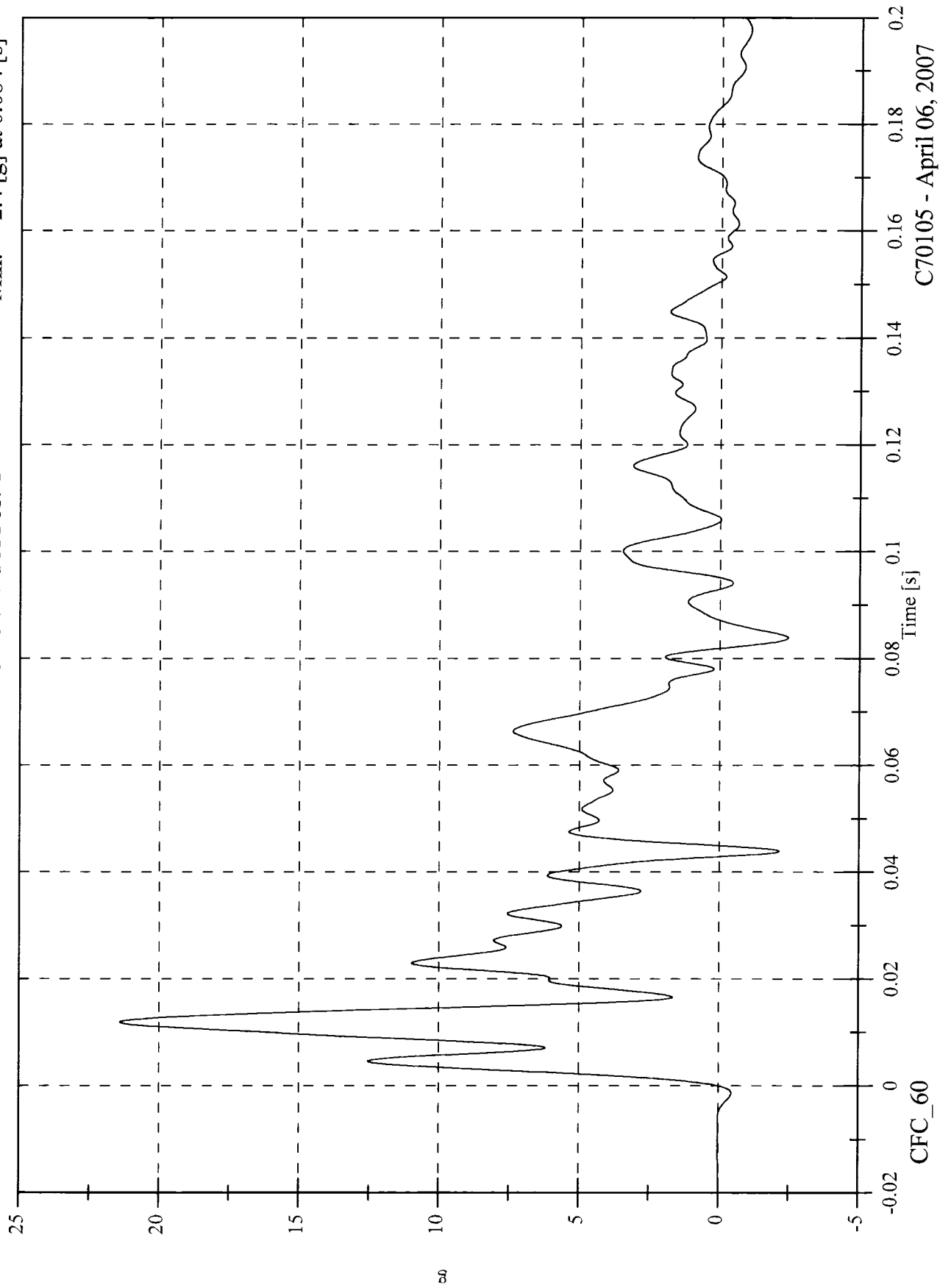


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V2 A15 Left Mid A Post Y

Max: 21.4 [g] at 0.012 [s]
Min: -2.4 [g] at 0.084 [s]

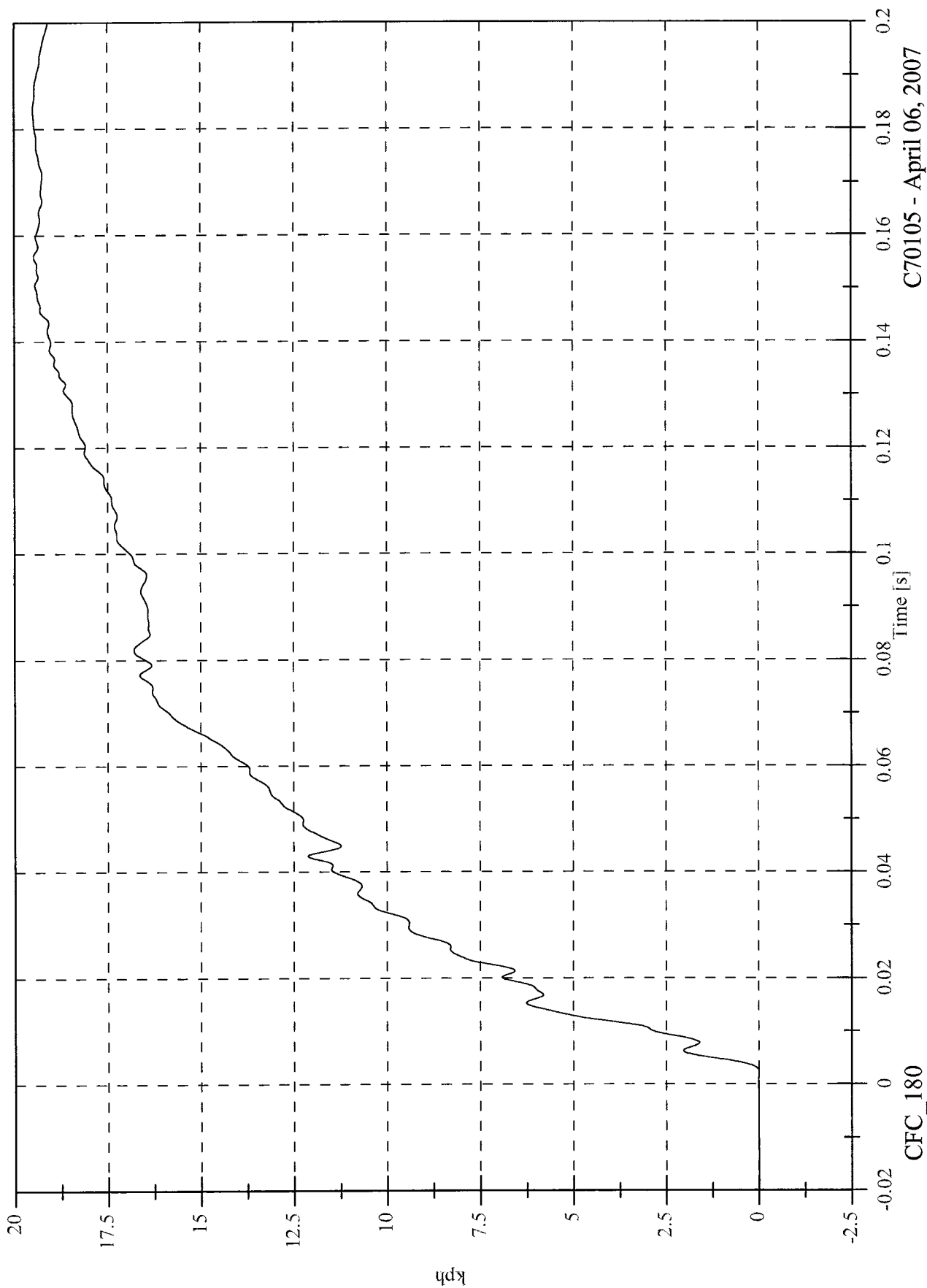


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Max: 19.5 [kph] at 0.184 [s]
Min: -0.0 [kph] at -0.018 [s]

V2 A15 Left Mid A Post Y Velocity

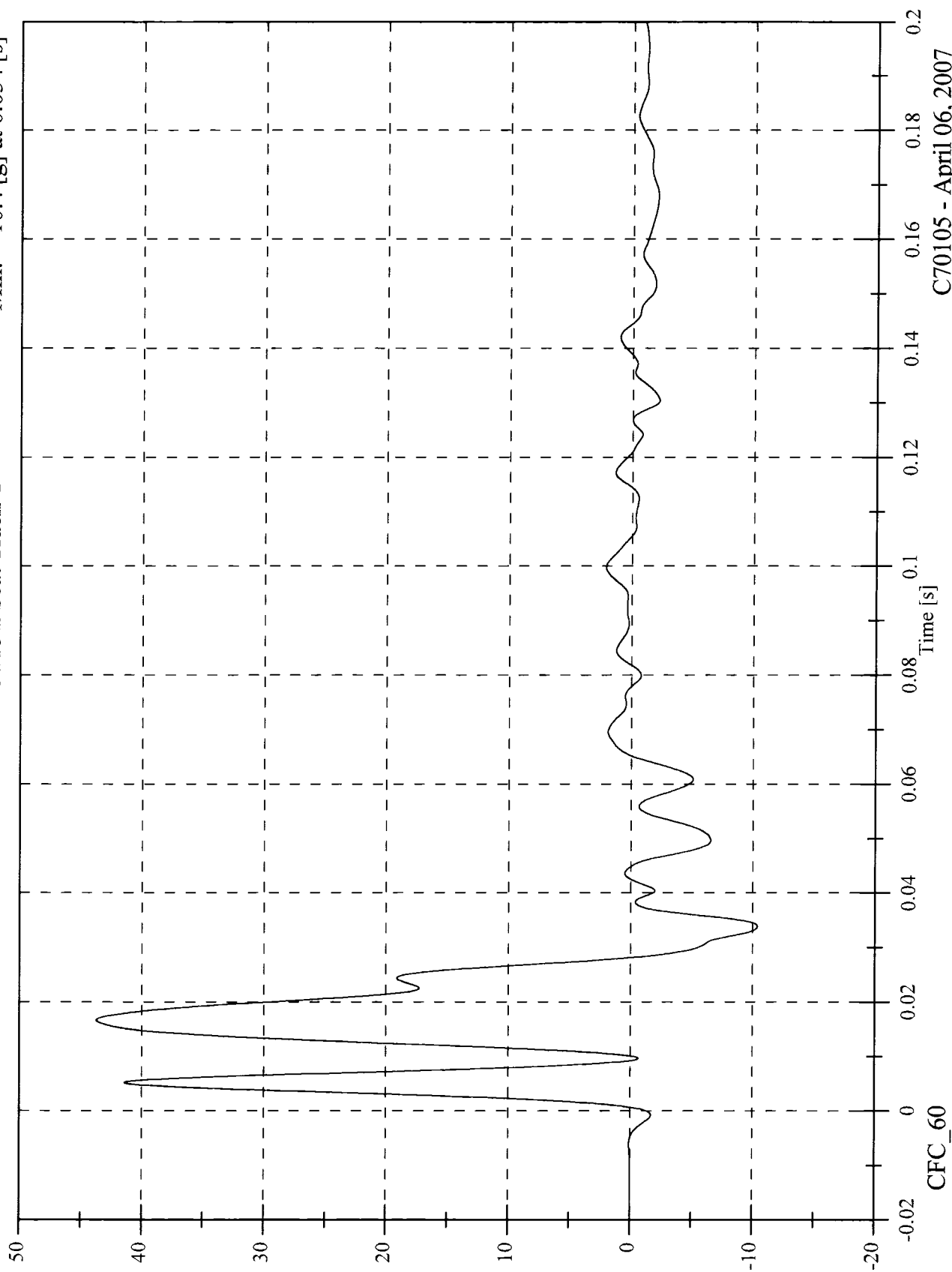


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V2 A16 Front Seat Track Y

Max: 43.7 [g] at 0.017 [s]
Min: -10.4 [g] at 0.034 [s]

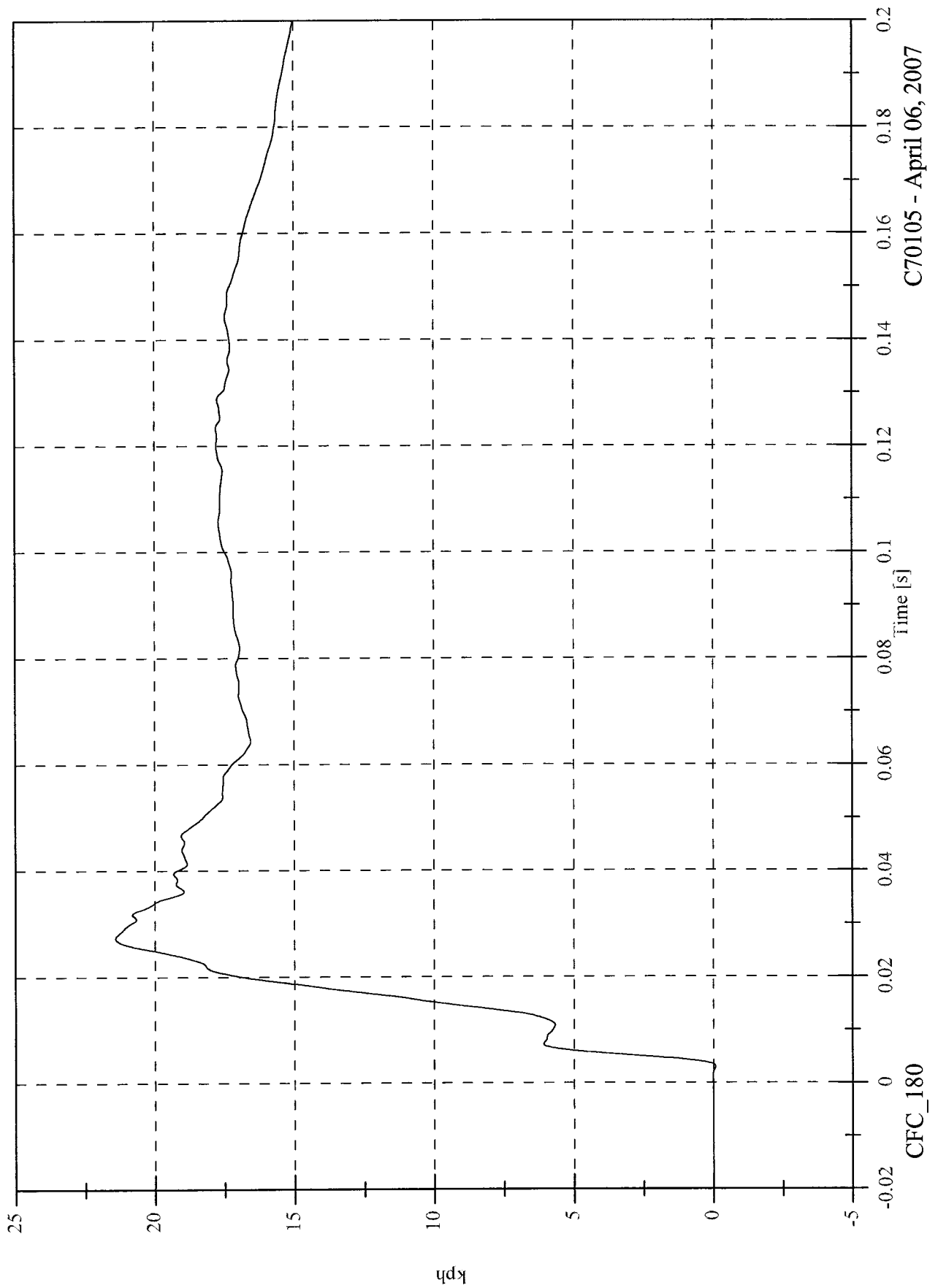


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Max: 21.4 [kph] at 0.027 [s]
Min: -0.1 [kph] at 0.003 [s]

V2 A16 Front Seat Track Y Velocity

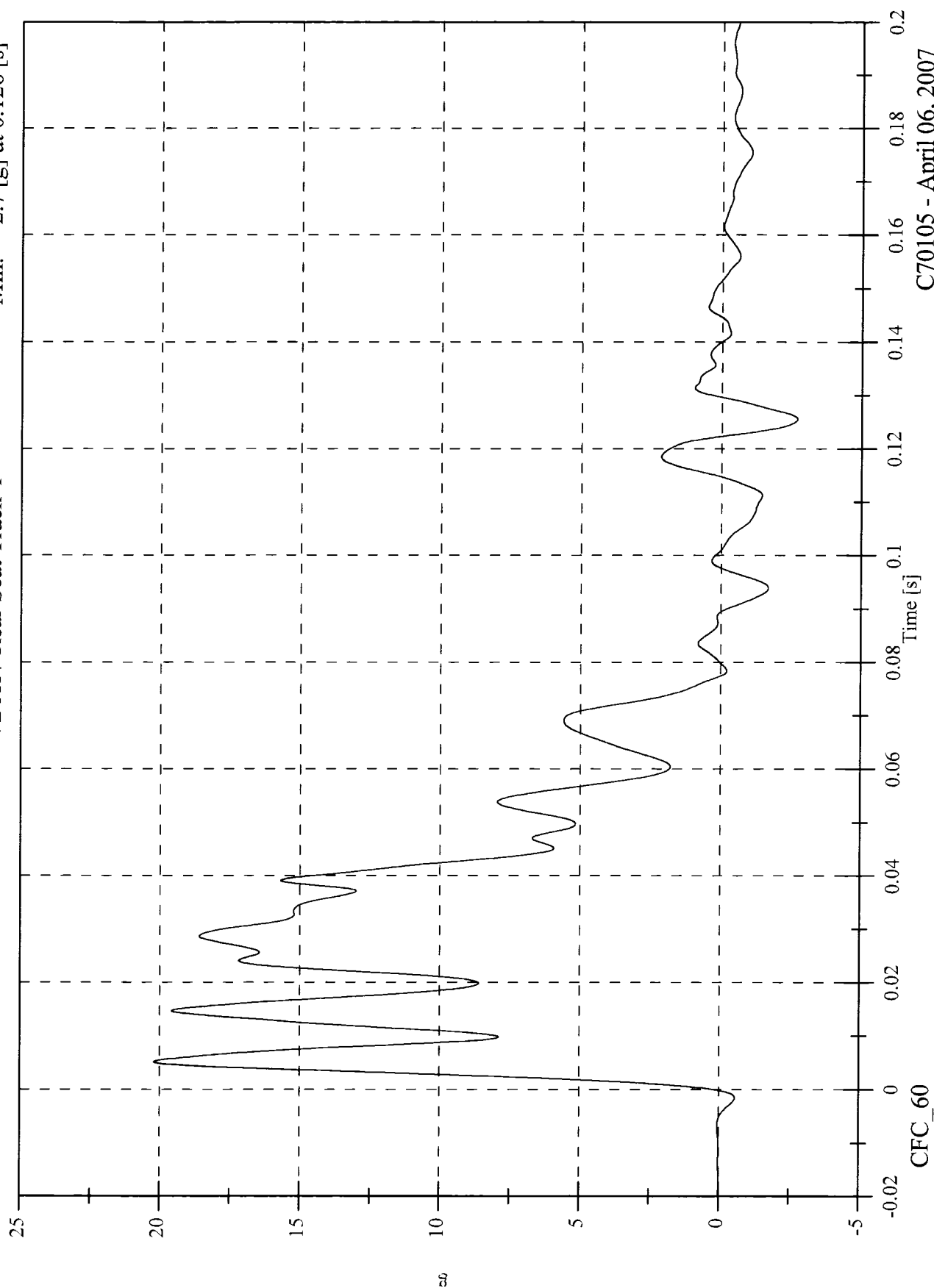


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V2 A17 Rear Seat Track Y

Max: 20.2 [g] at 0.005 [s]
Min: -2.7 [g] at 0.126 [s]

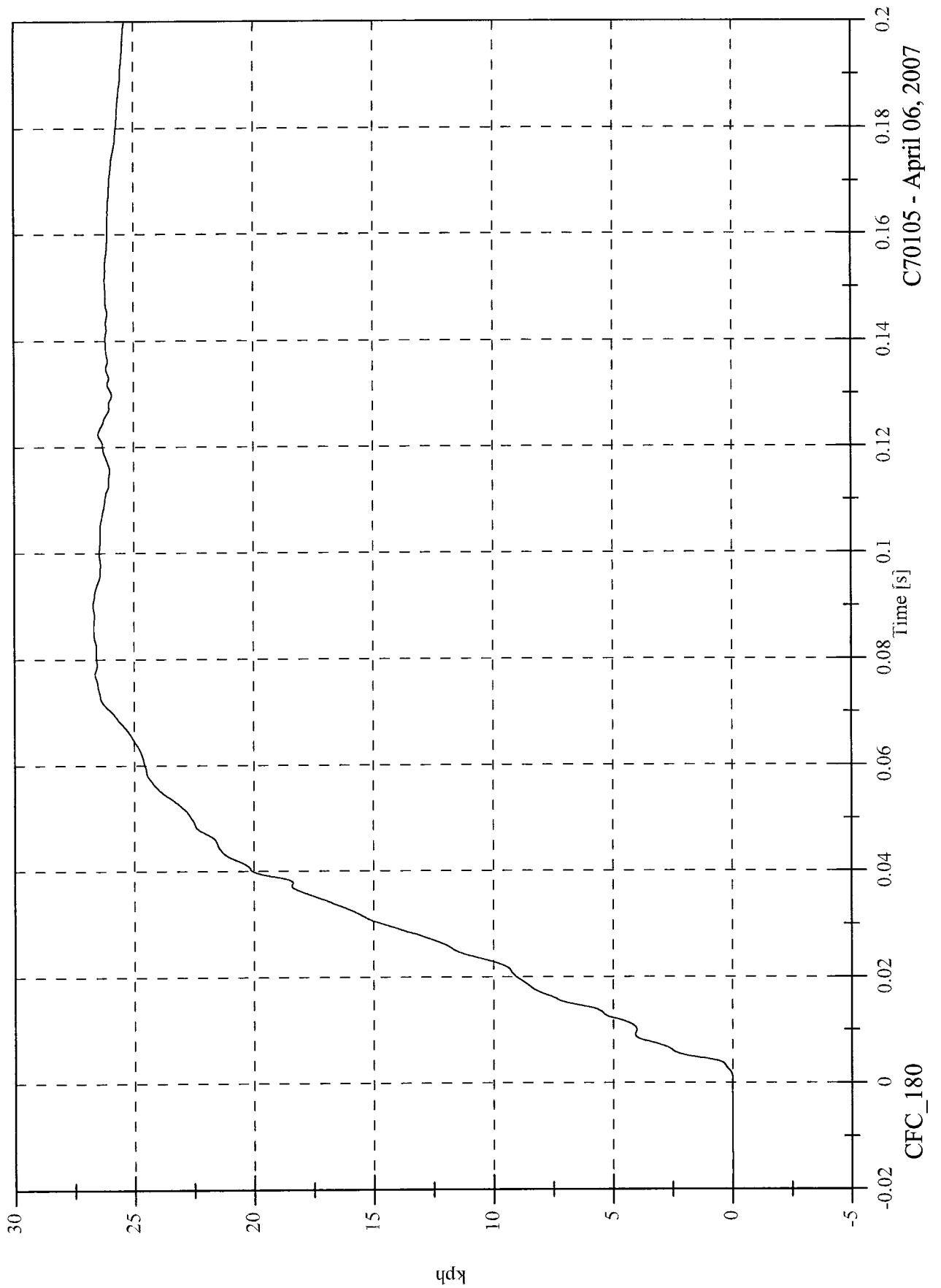


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Max: 26.7 [kph] at 0.090 [s]
Min: -0.0 [kph] at -0.020 [s]

V2 A17 Rear Seat Track Y Velocity

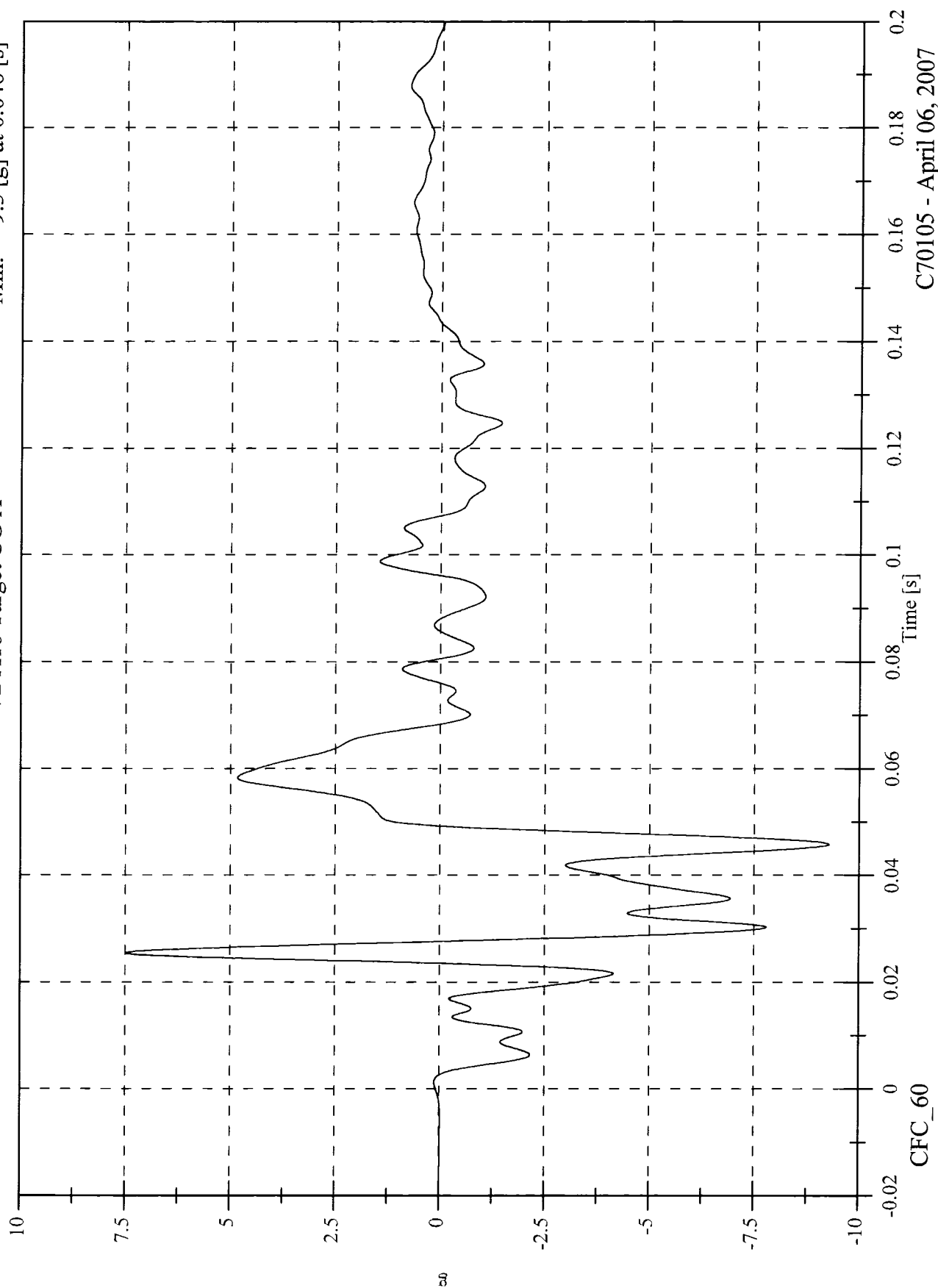


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V2 A18 Target CG X

Max: 7.5 [g] at 0.025 [s]
Min: -9.3 [g] at 0.046 [s]

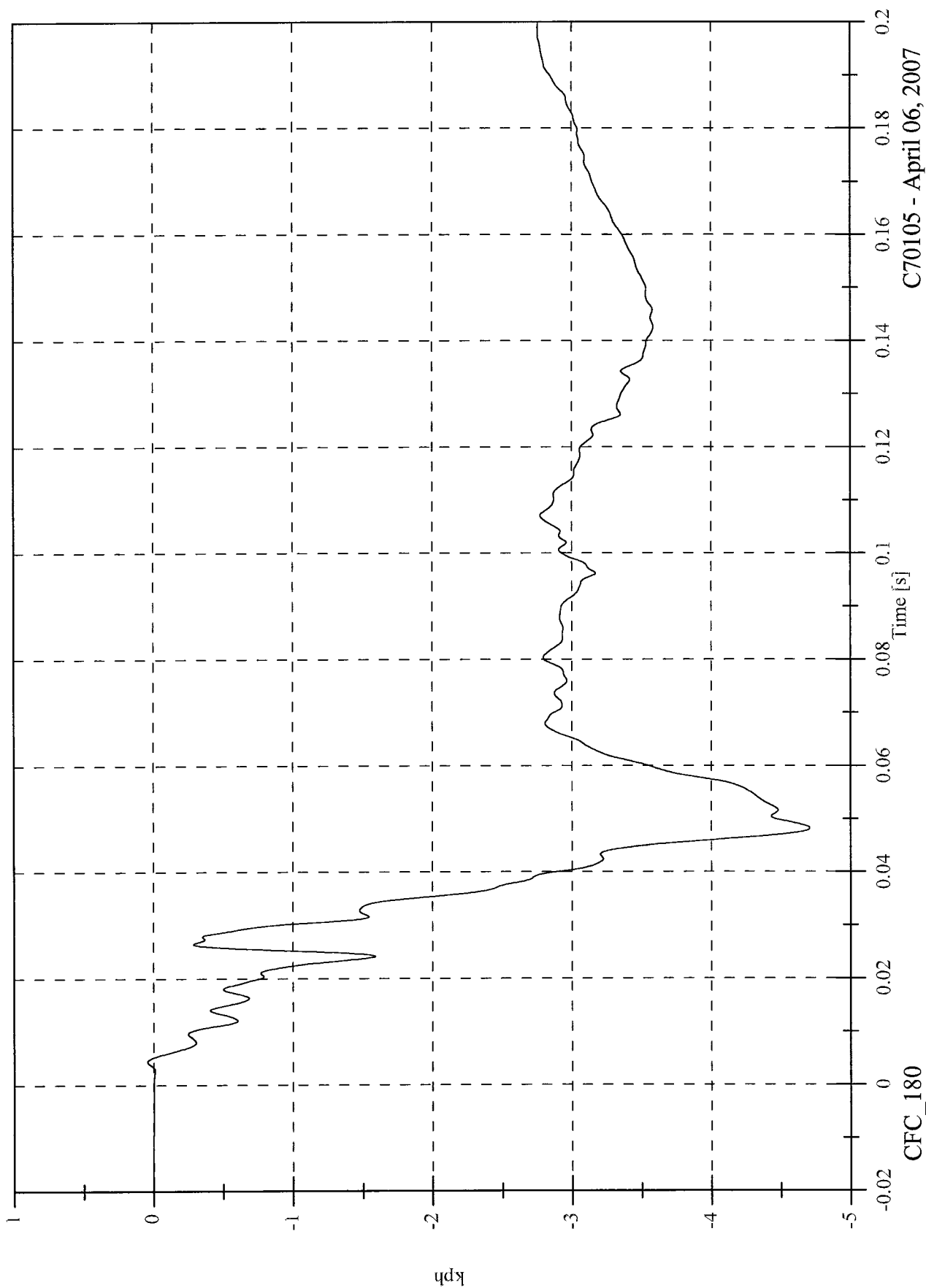


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Max: 0.0 [kph] at 0.004 [s]
Min: -4.7 [kph] at 0.048 [s]

V2 A18 Target CG X Velocity



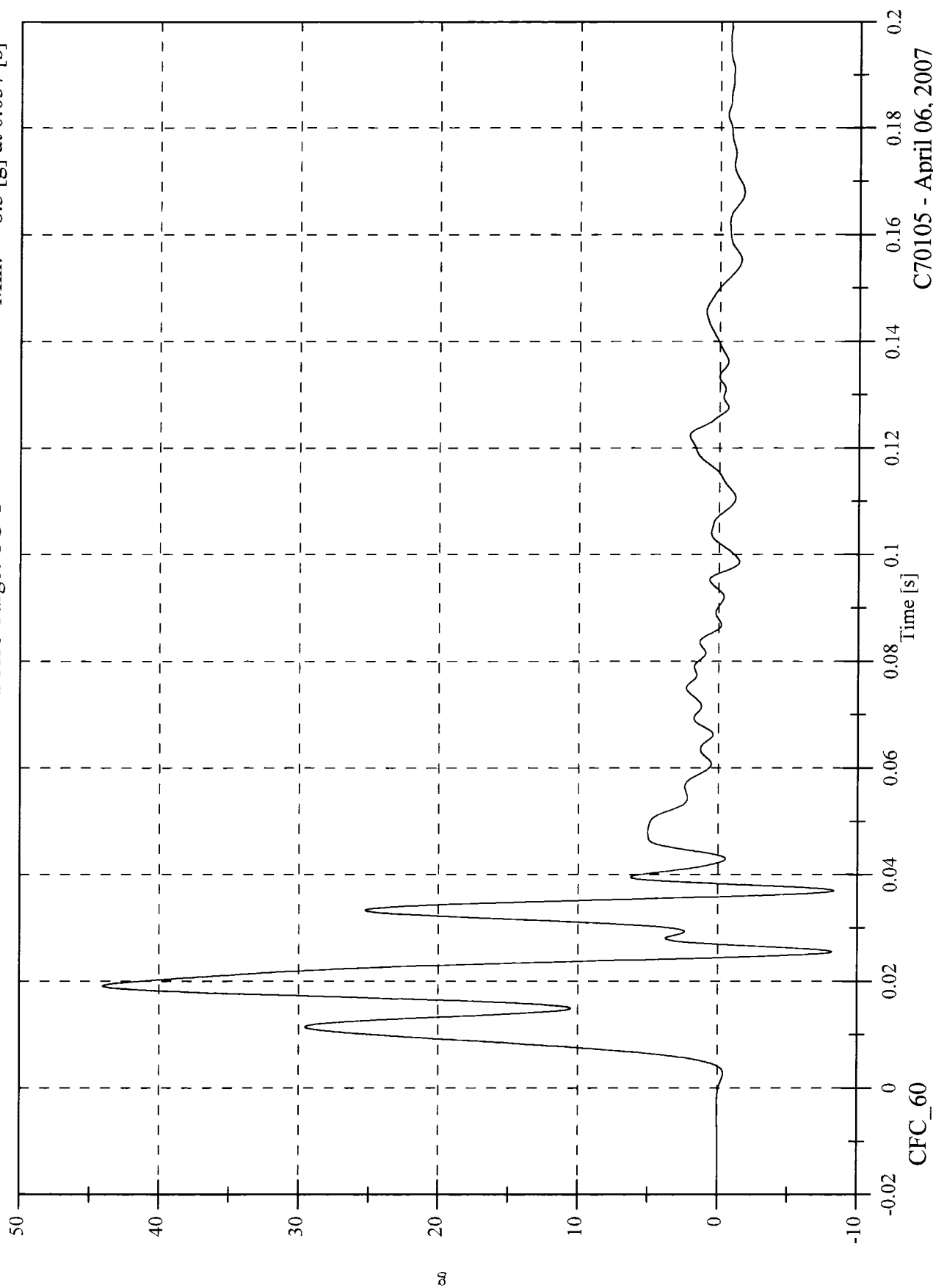
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V2 A18 Target CG Y

Max: 44.0 [g] at 0.019 [s]
Min: -8.3 [g] at 0.037 [s]

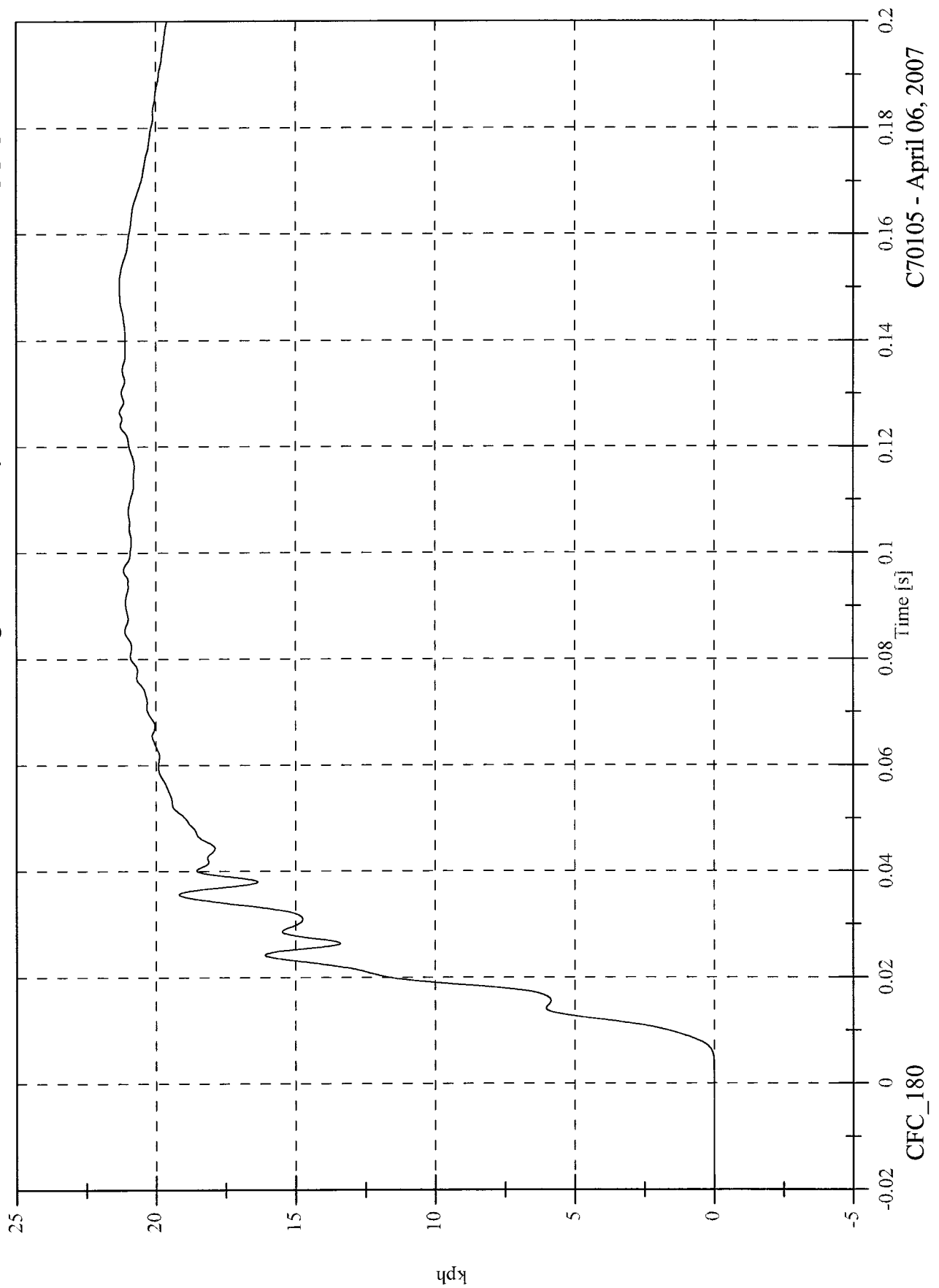


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Max: 21.3 [kph] at 0.151 [s]
Min: -0.0 [kph] at -0.020 [s]

V2 A18 Target CG Y Velocity

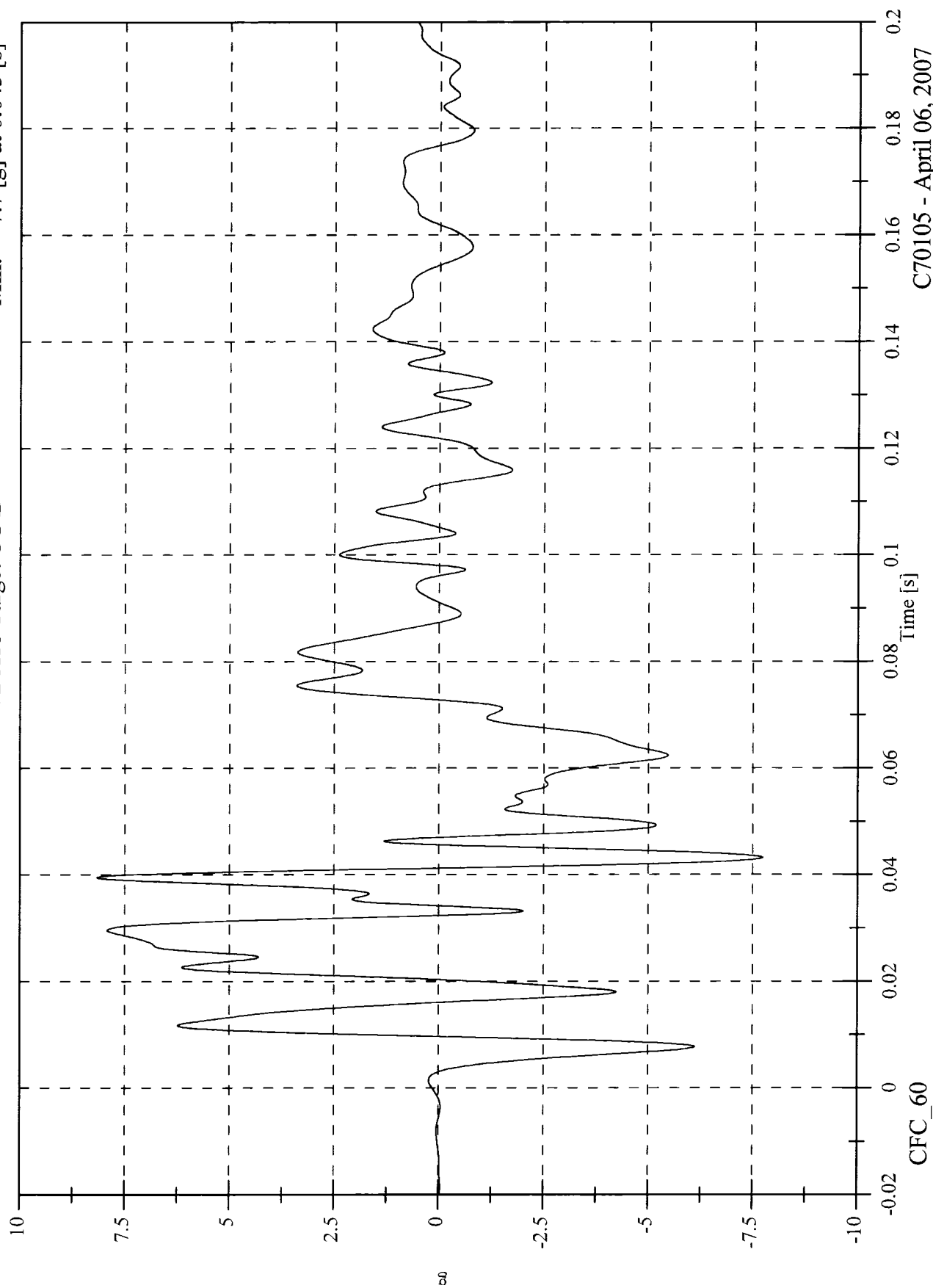


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V2 A18 Target CG Z

Max: 8.2 [g] at 0.039 [s]
Min: -7.7 [g] at 0.043 [s]

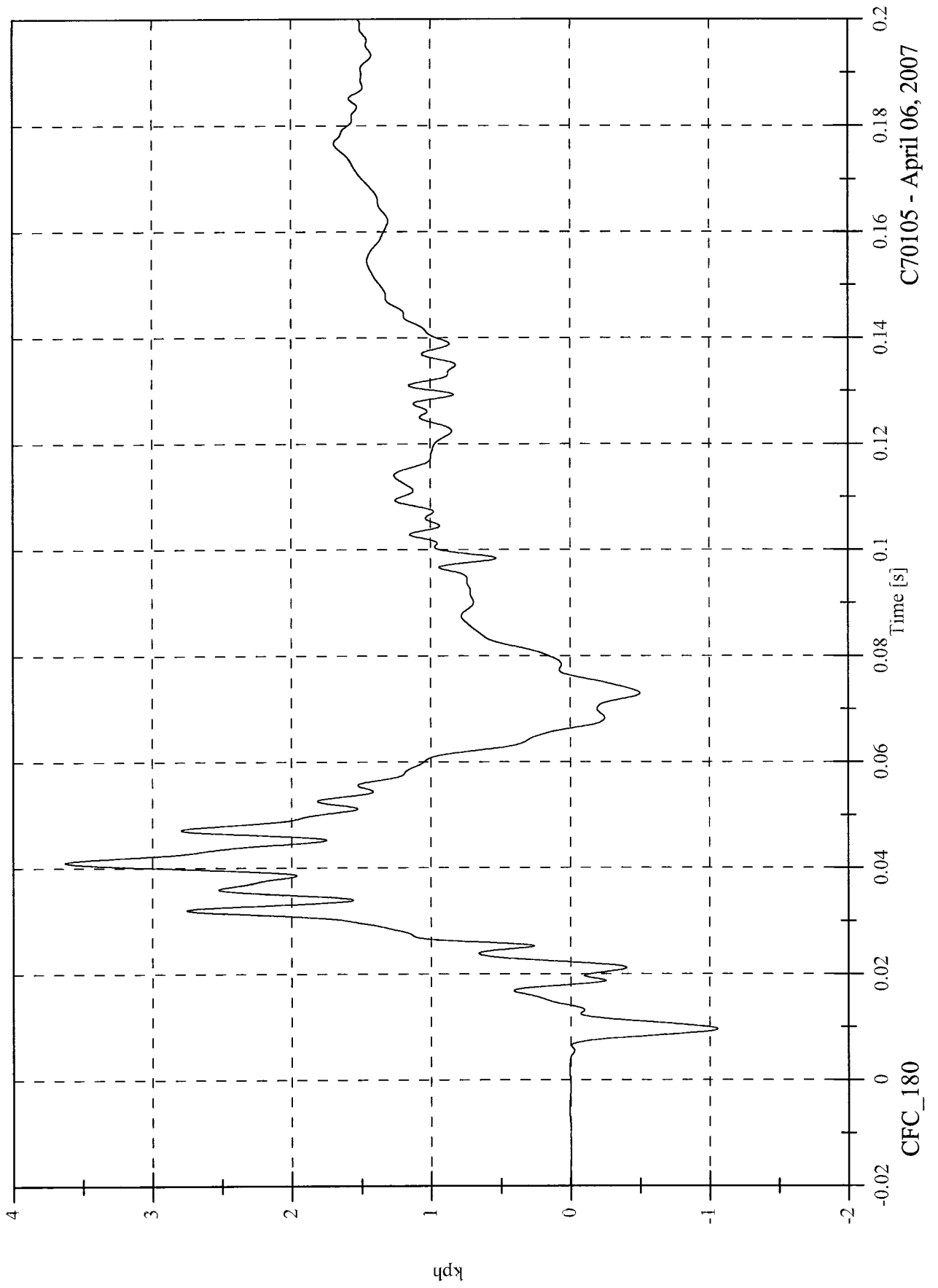


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Max: 3.6 [kph] at 0.041 [s]
Min: -1.1 [kph] at 0.010 [s]

V2 A18 Target CG Z Velocity

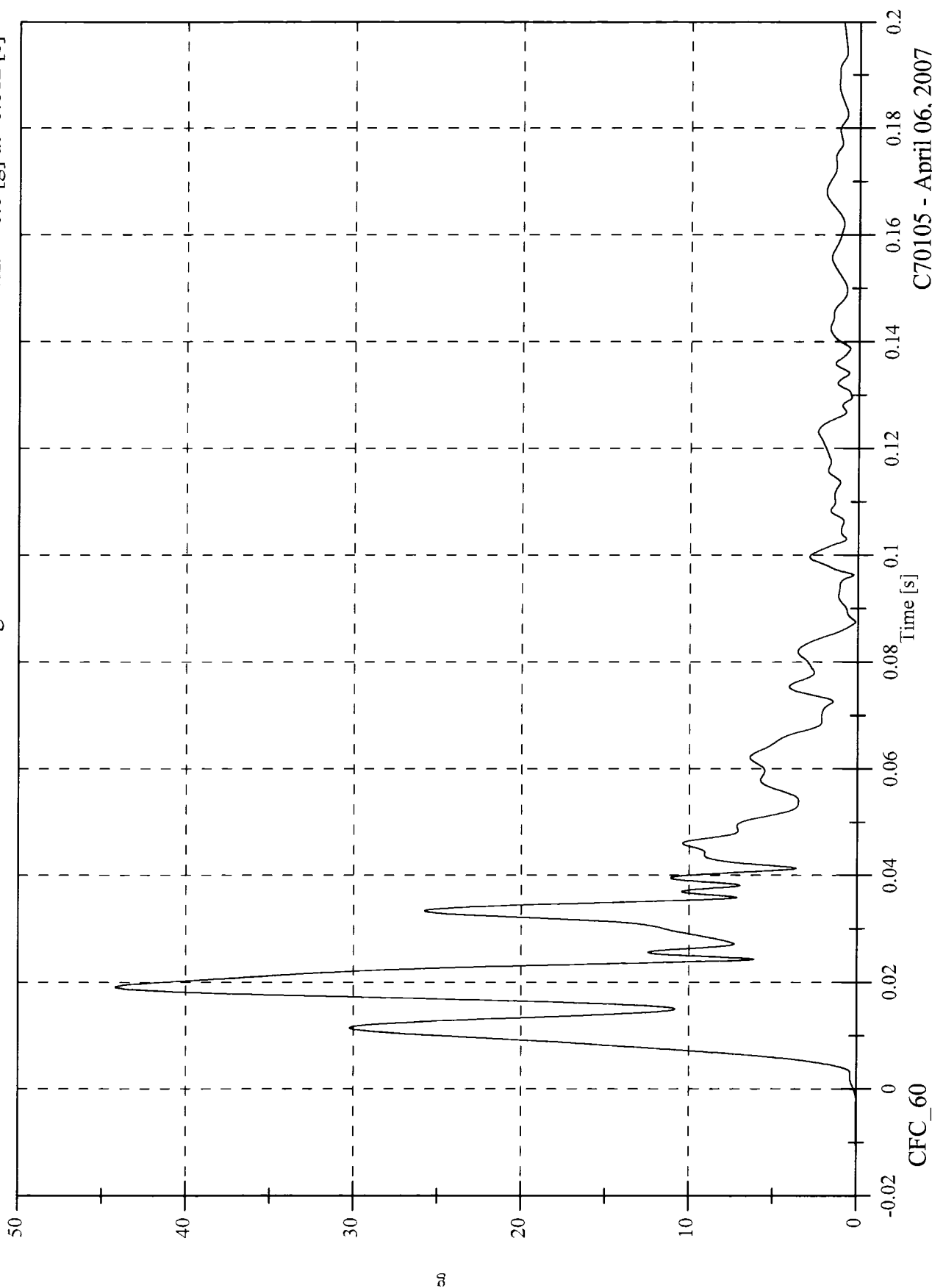


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V2 A18 Target CG Resultant

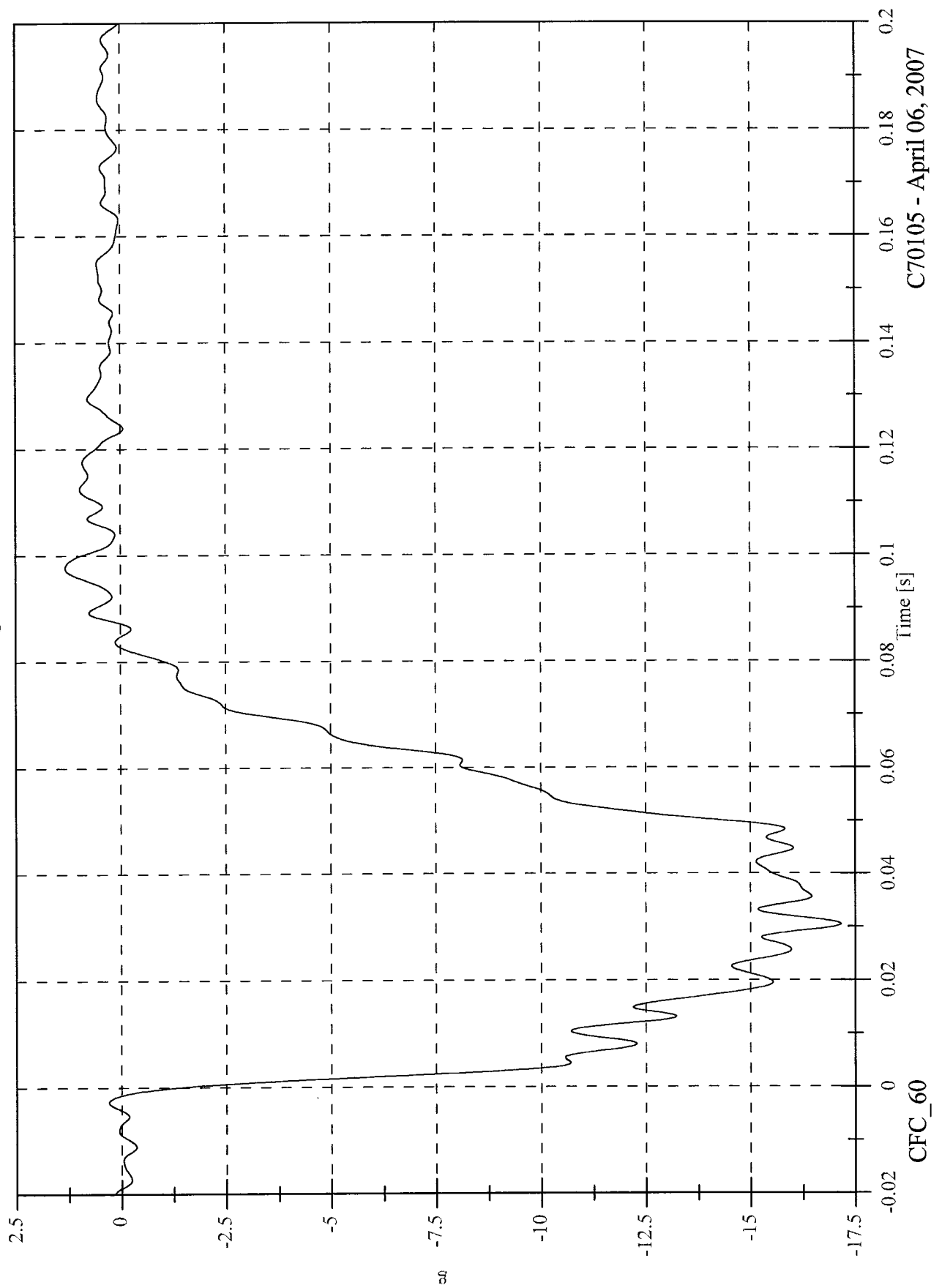
Max: 44.2 [g] at 0.019 [s]
Min: 0.0 [g] at -0.012 [s]



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Max: 1.3 [g] at 0.098 [s]
Min: -17.2 [g] at 0.030 [s]

V1 Moving Barrier CG X

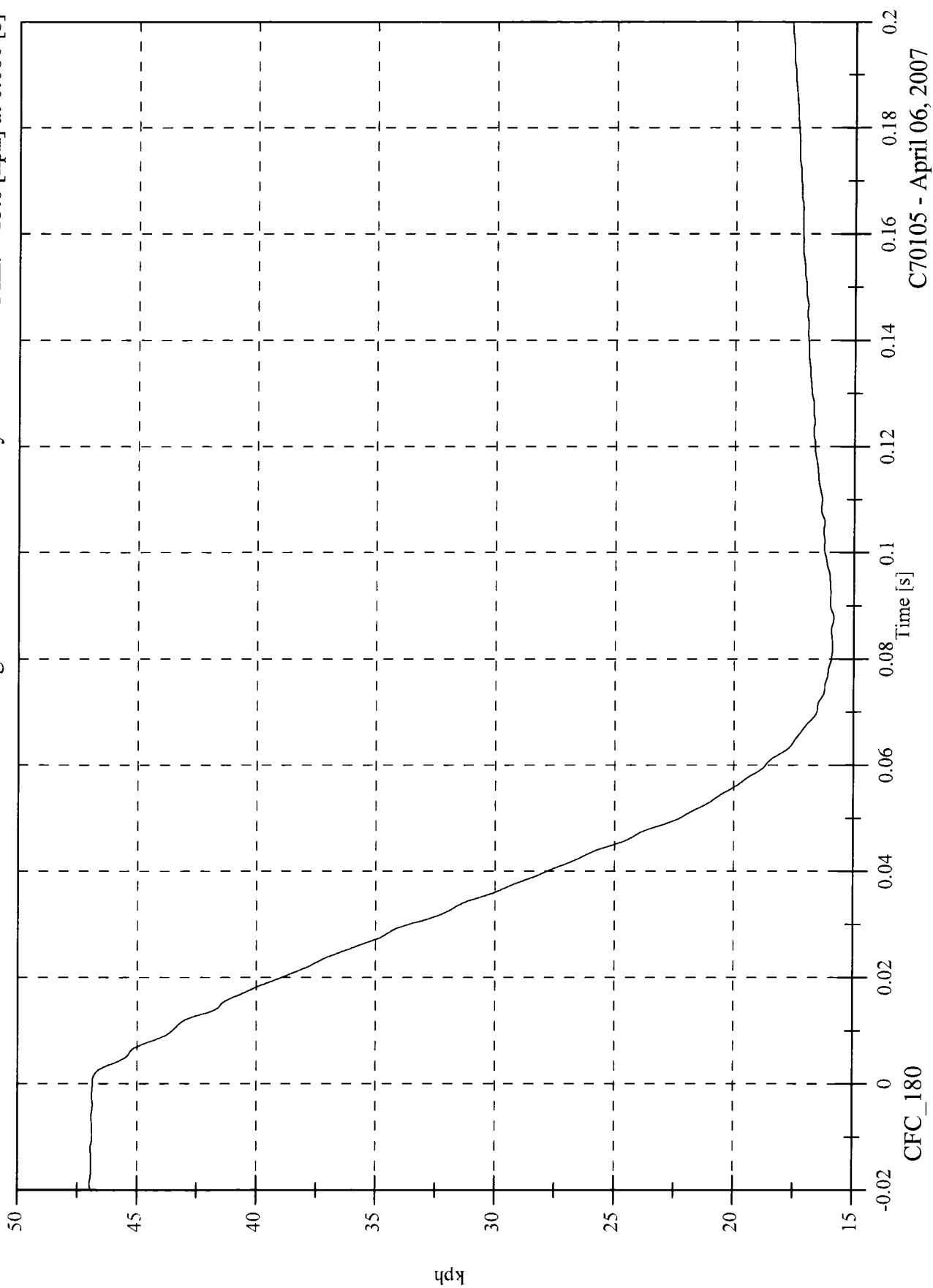


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V1 Moving Barrier CG X Velocity

Max: 47.0 [kph] at -0.019 [s]
Min: 15.8 [kph] at 0.088 [s]

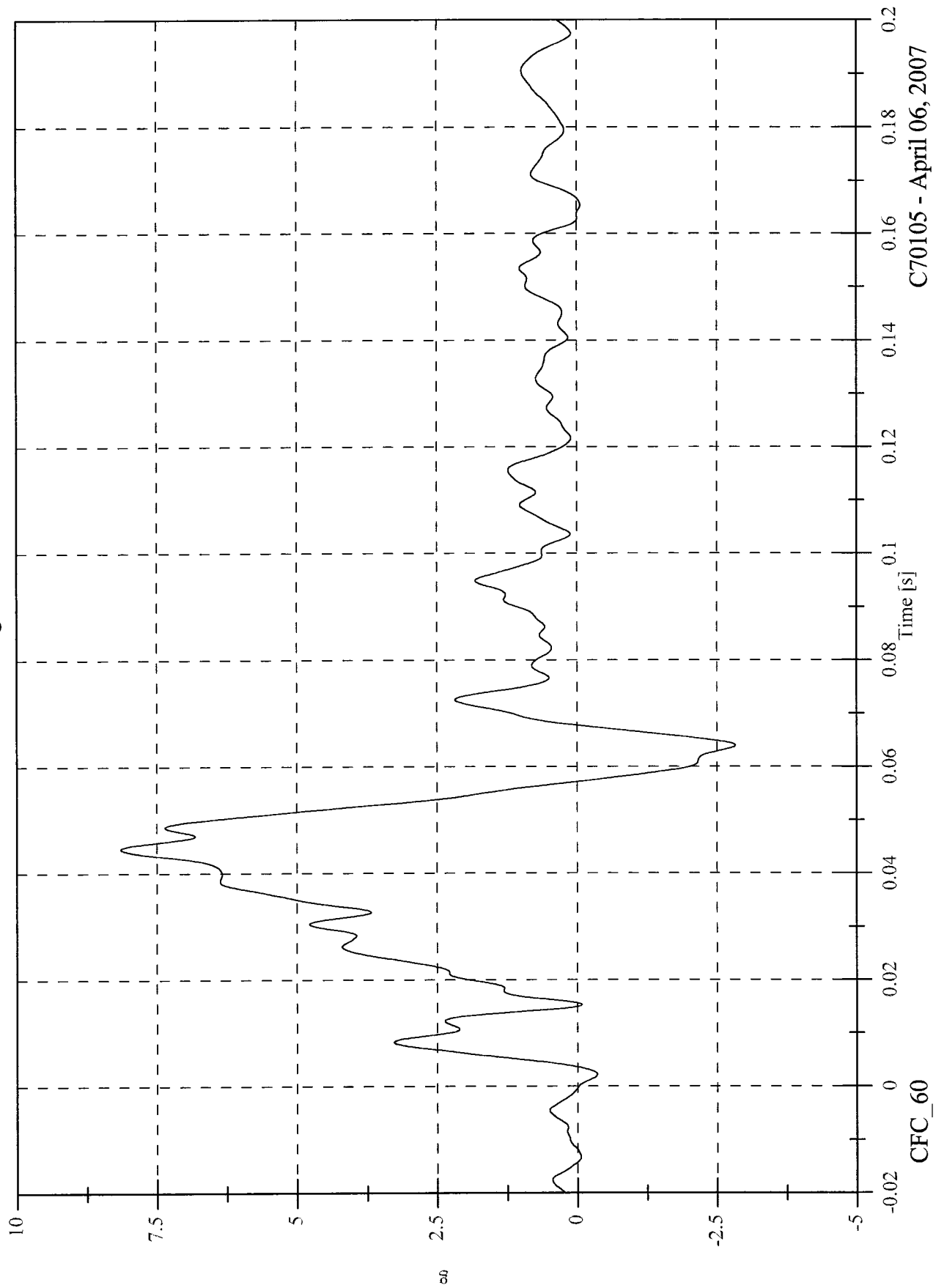


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Max: 8.1 [g] at 0.045 [s]
Min: -2.8 [g] at 0.064 [s]

V1 Moving Barrier CG Y

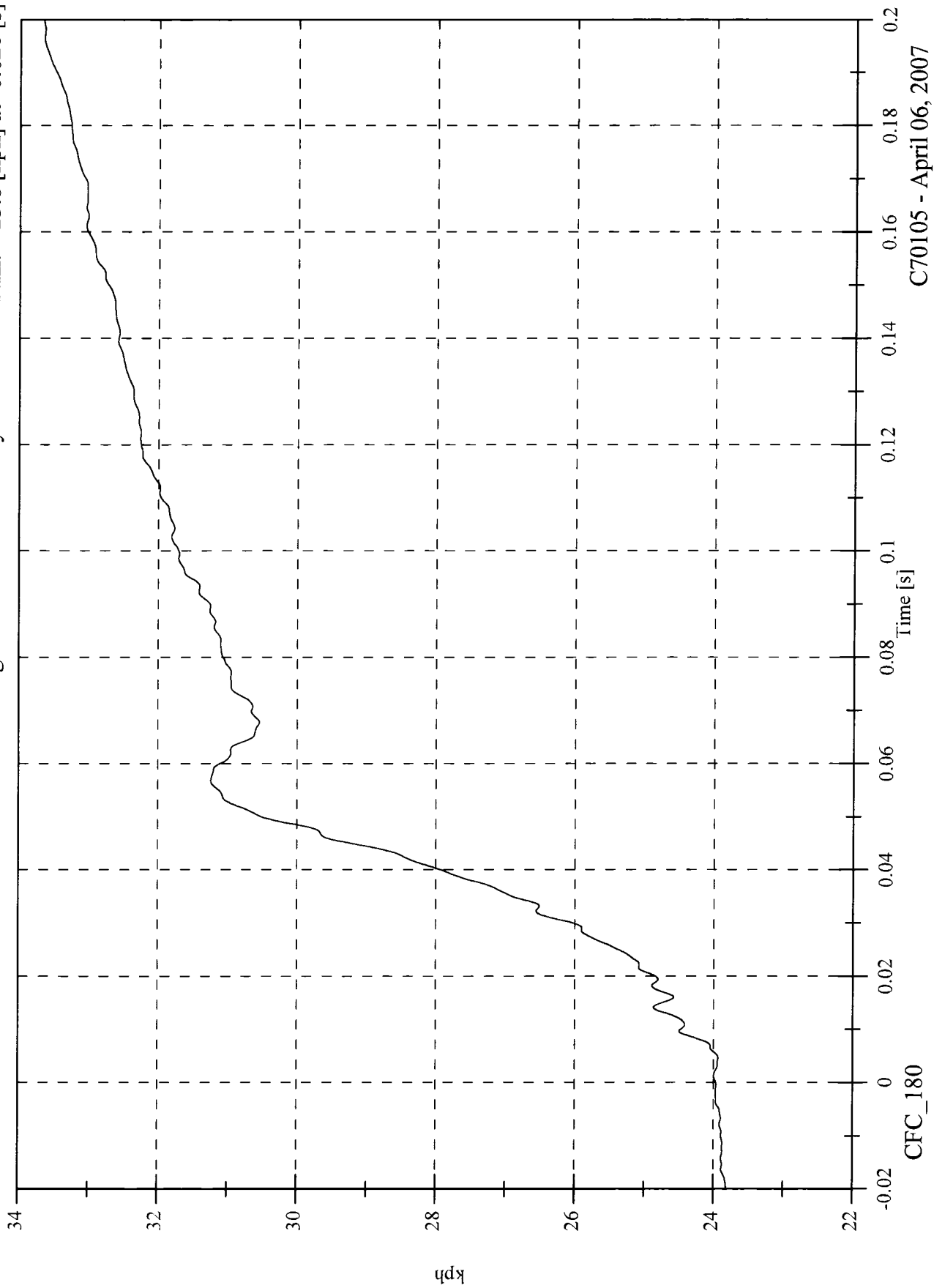


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V1 Moving Barrier CG Y Velocity

Max: 33.7 [kph] at 0.200 [s]
Min: 23.8 [kph] at -0.020 [s]

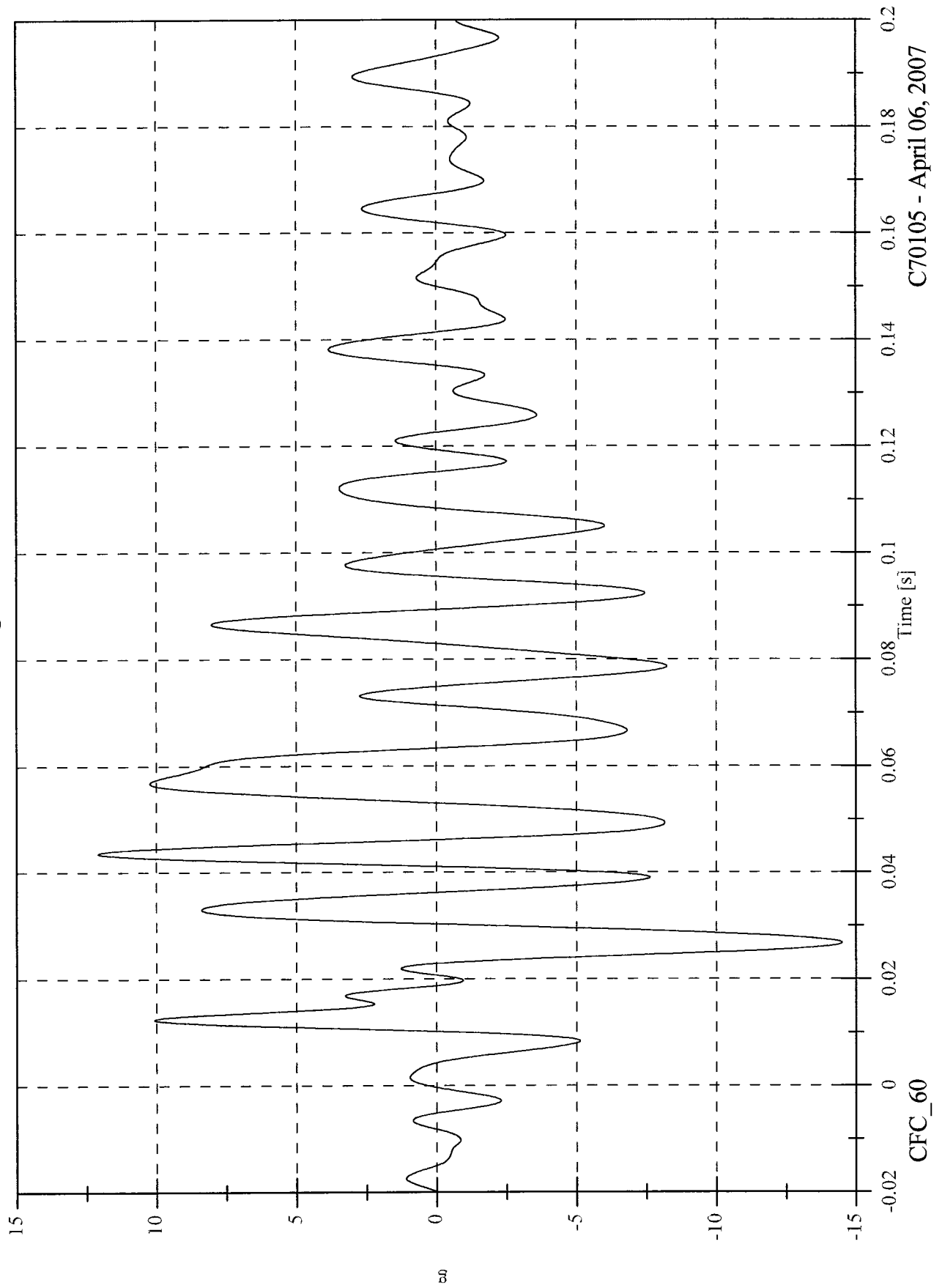


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Max: 12.1 [g] at 0.044 [s]
Min: -14.5 [g] at 0.027 [s]

V1 Moving Barrier CG Z

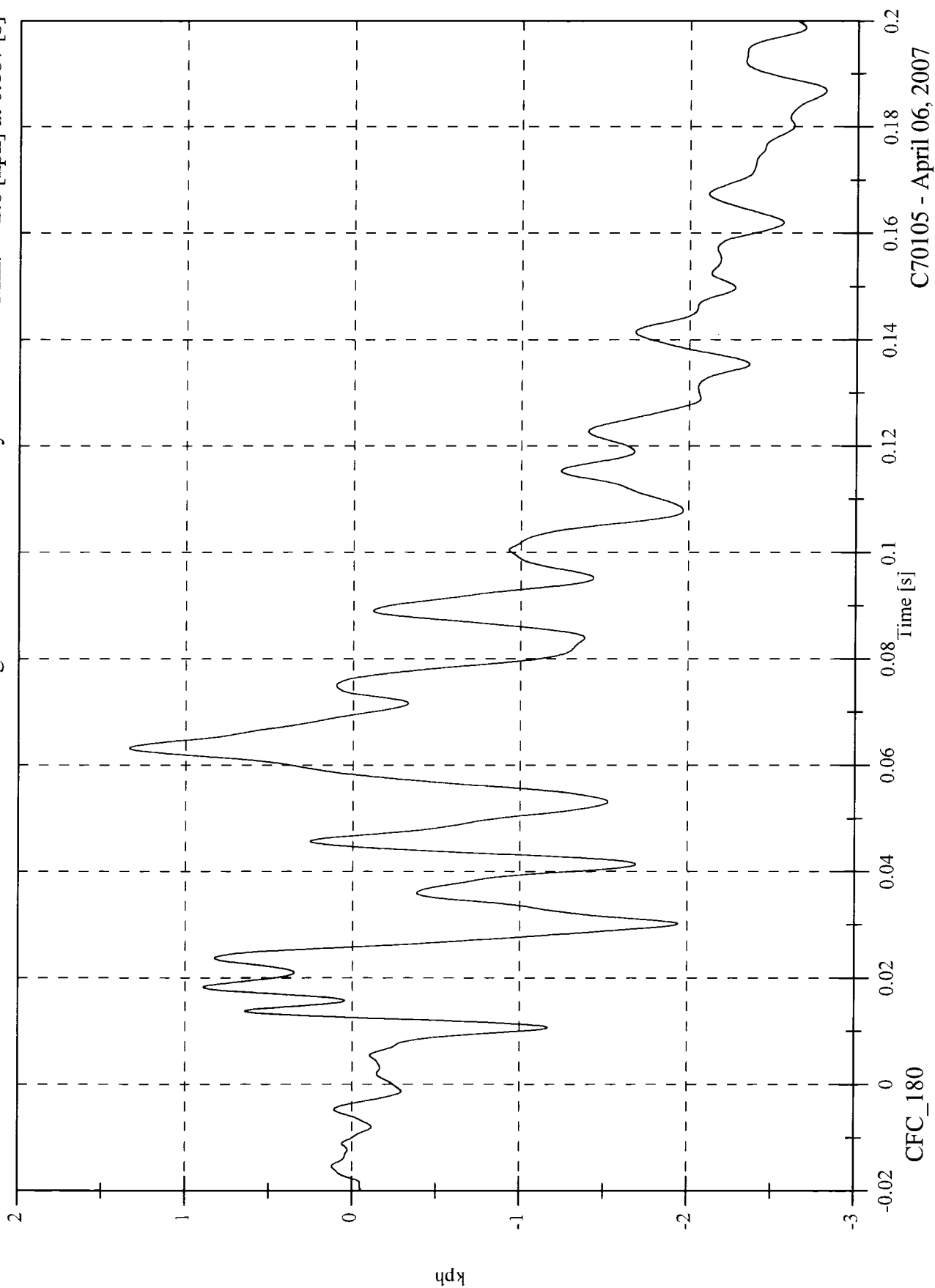


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Max: 1.3 [kph] at 0.063 [s]
Min: -2.8 [kph] at 0.187 [s]

V1 Moving Barrier CG Z Velocity

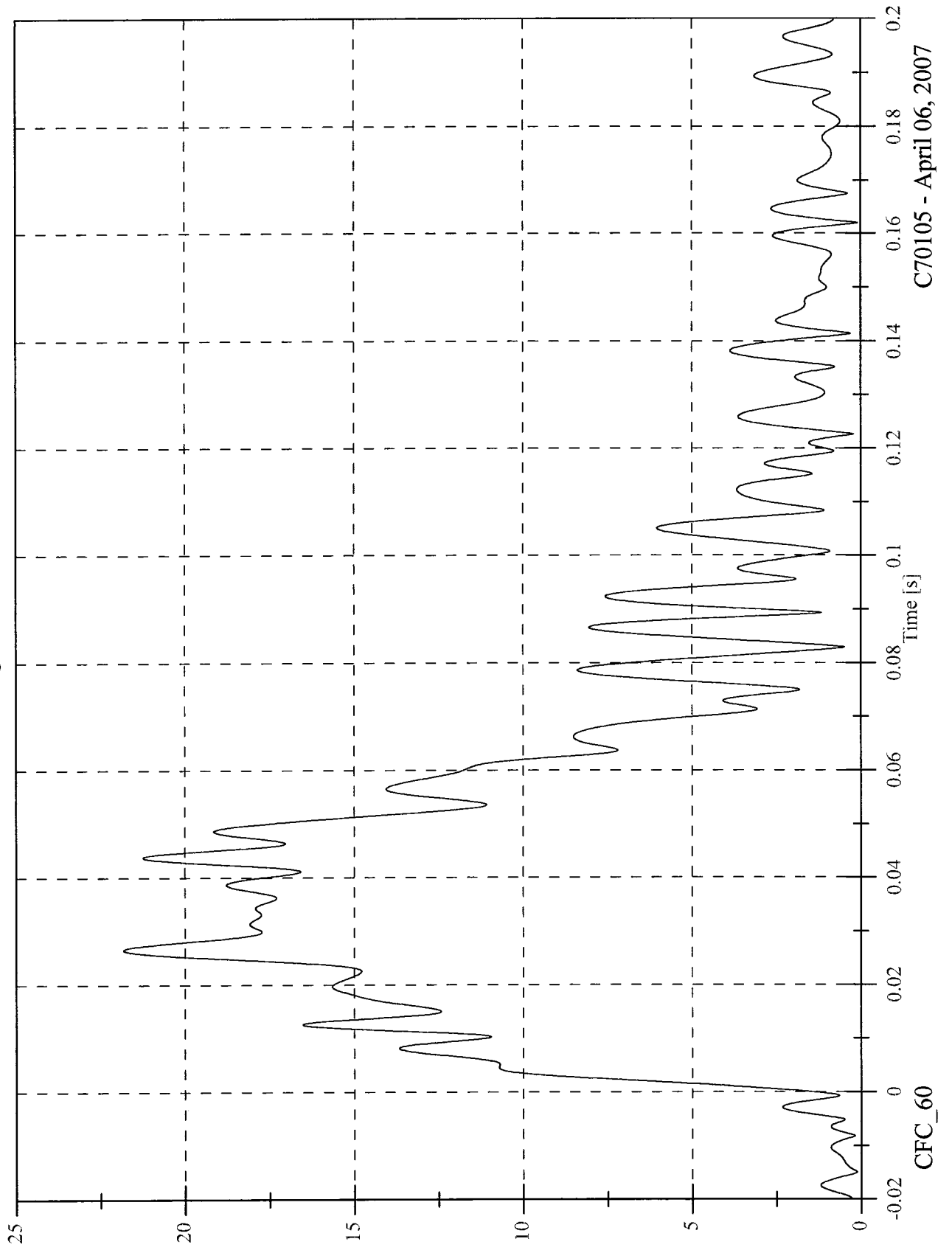


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Max: 21.8 [g] at 0.027 [s]
Min: 0.1 [g] at 0.162 [s]

V1 Moving Barrier CG Resultant

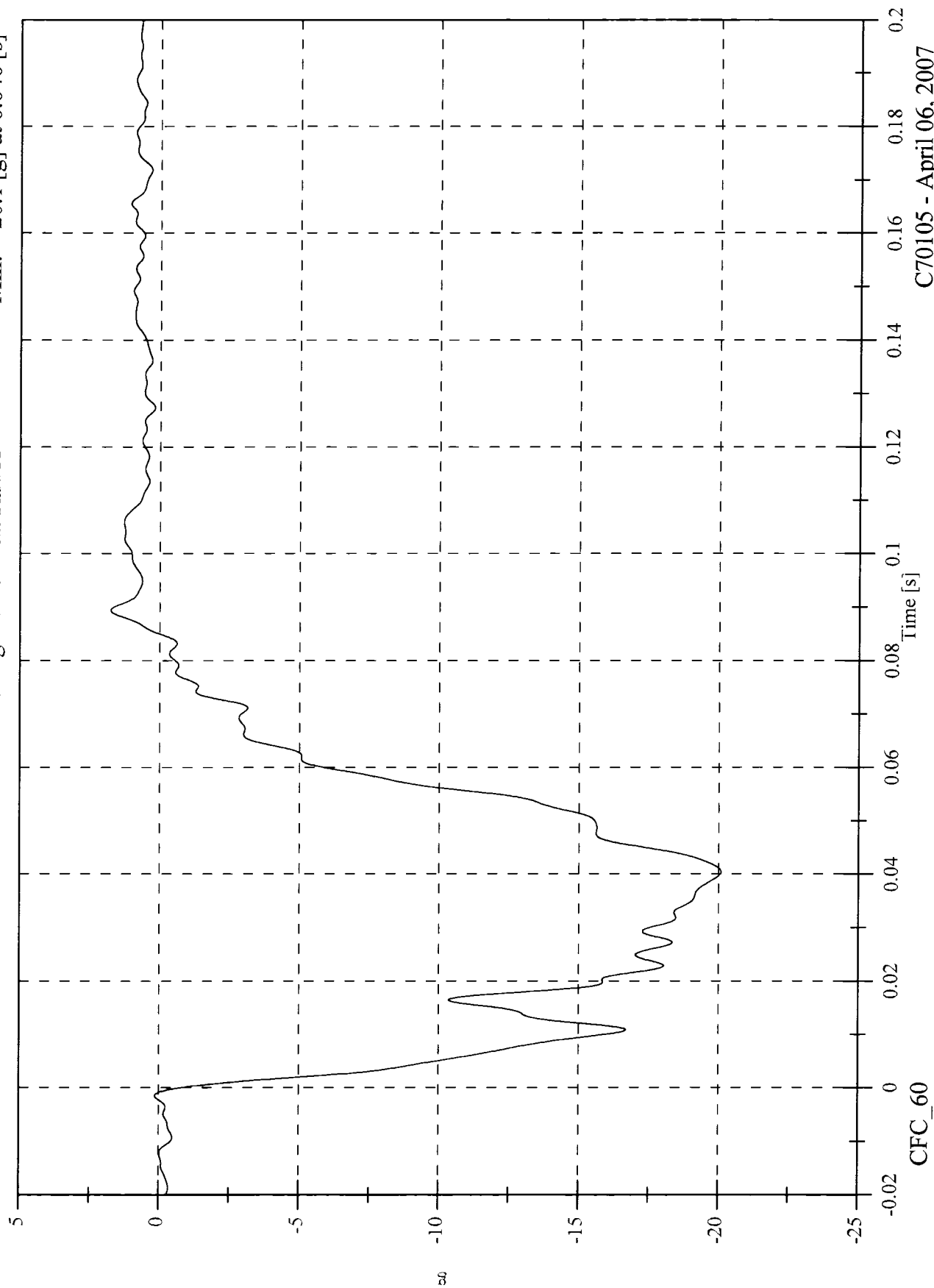


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V1 Moving Barrier Left Rail X

Max: 1.8 [g] at 0.089 [s]
Min: -20.1 [g] at 0.040 [s]

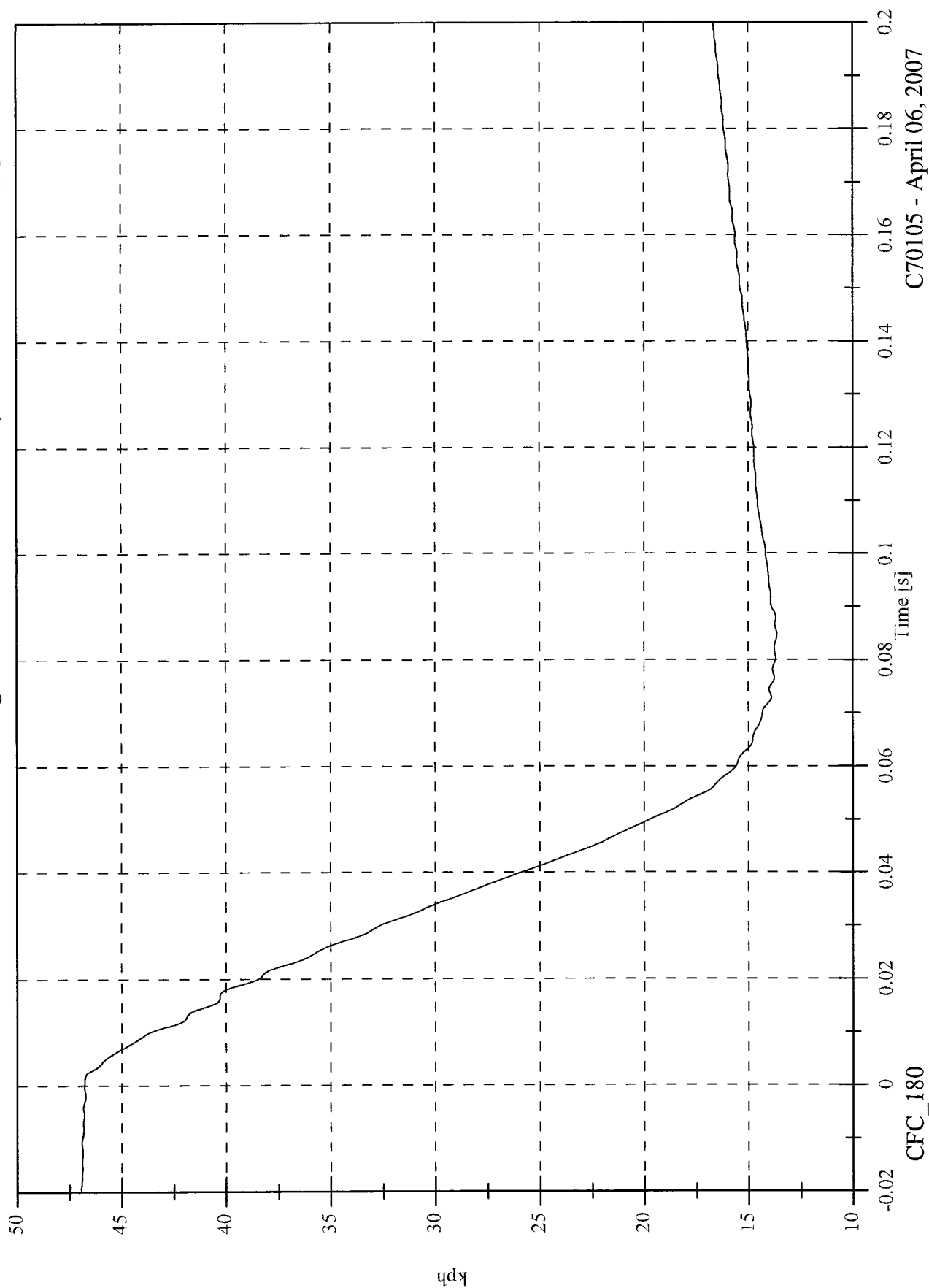


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V1 Moving Barrier Left Rail X Velocity

Max: 46.9 [kph] at -0.020 [s]
Min: 13.6 [kph] at 0.085 [s]

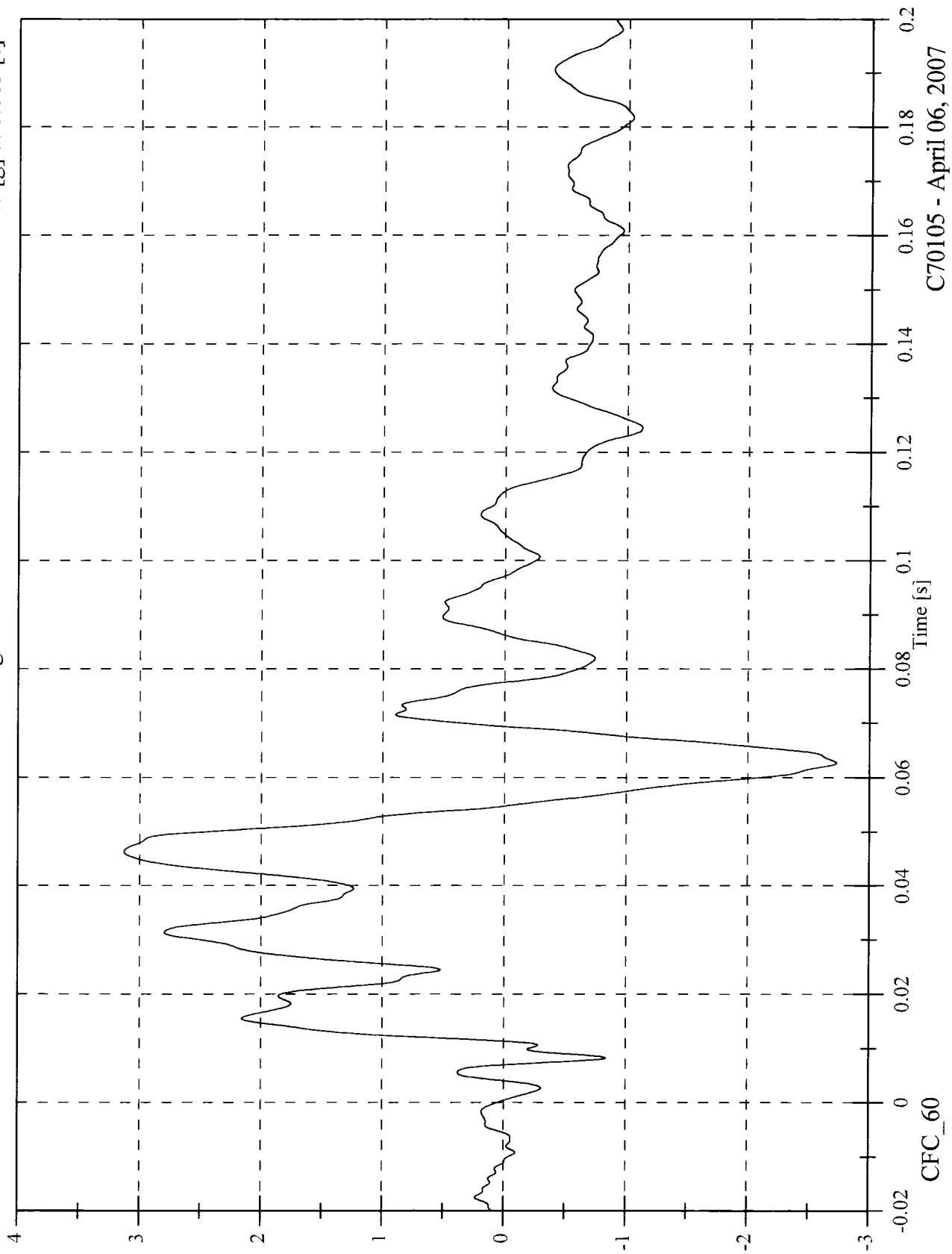


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V1 Moving Barrier Left Rail Y

Max: 3.1 [g] at 0.046 [s]
Min: -2.7 [g] at 0.063 [s]

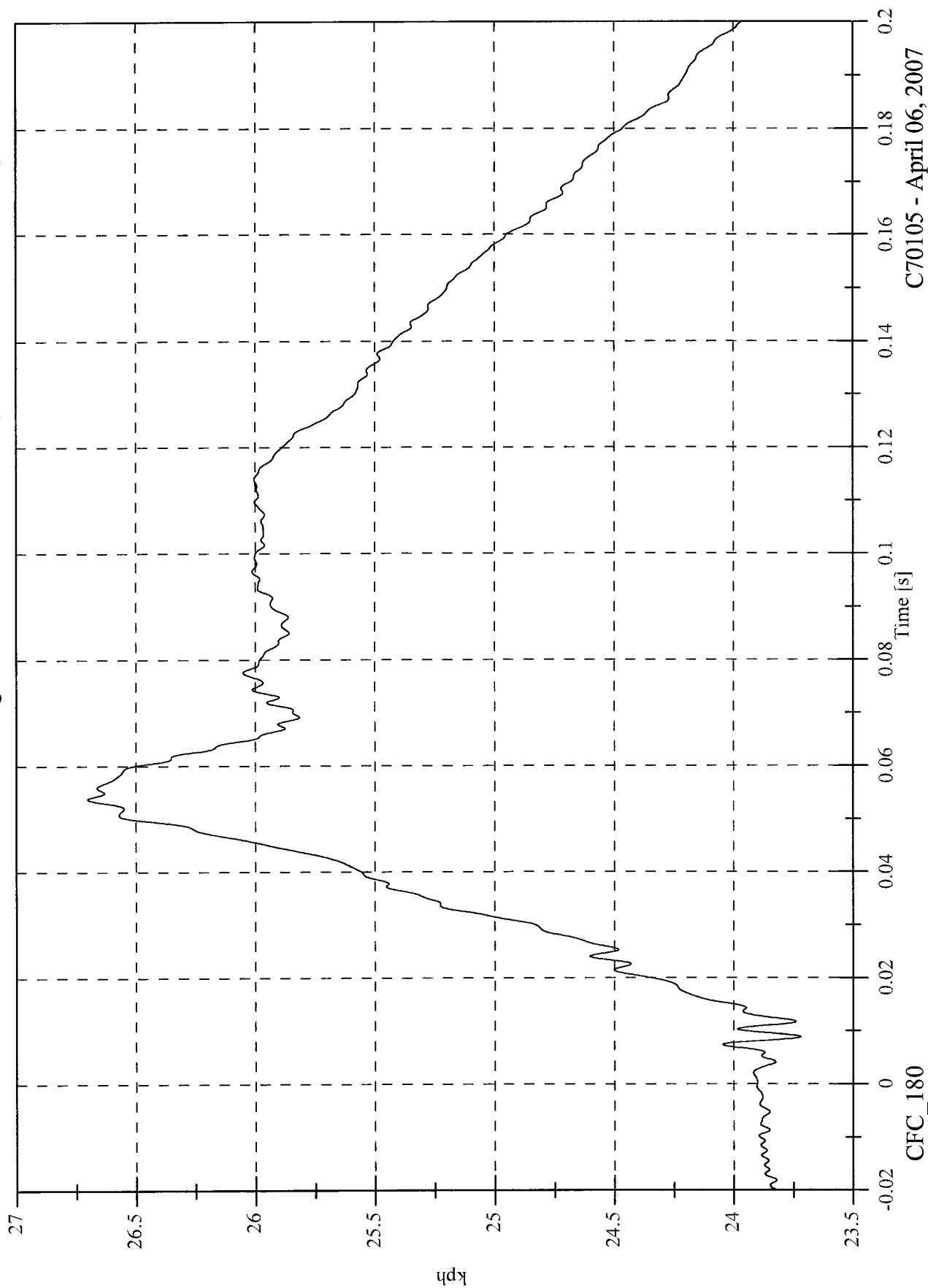


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Max: 26.7 [kph] at 0.054 [s]
Min: 23.7 [kph] at 0.009 [s]

V1 Moving Barrier Left Rail Y Velocity

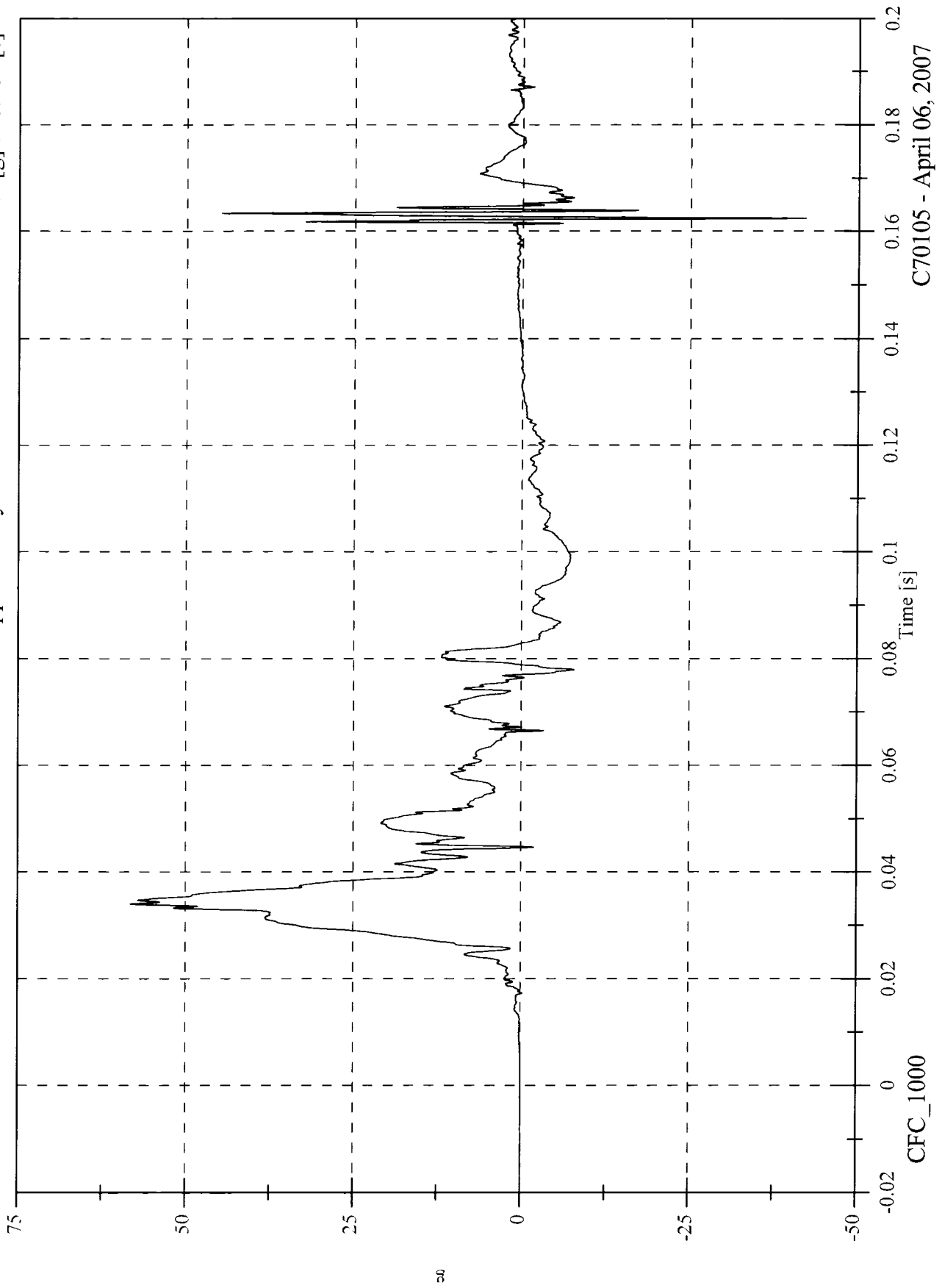


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V2P1 Upper Rib Ry

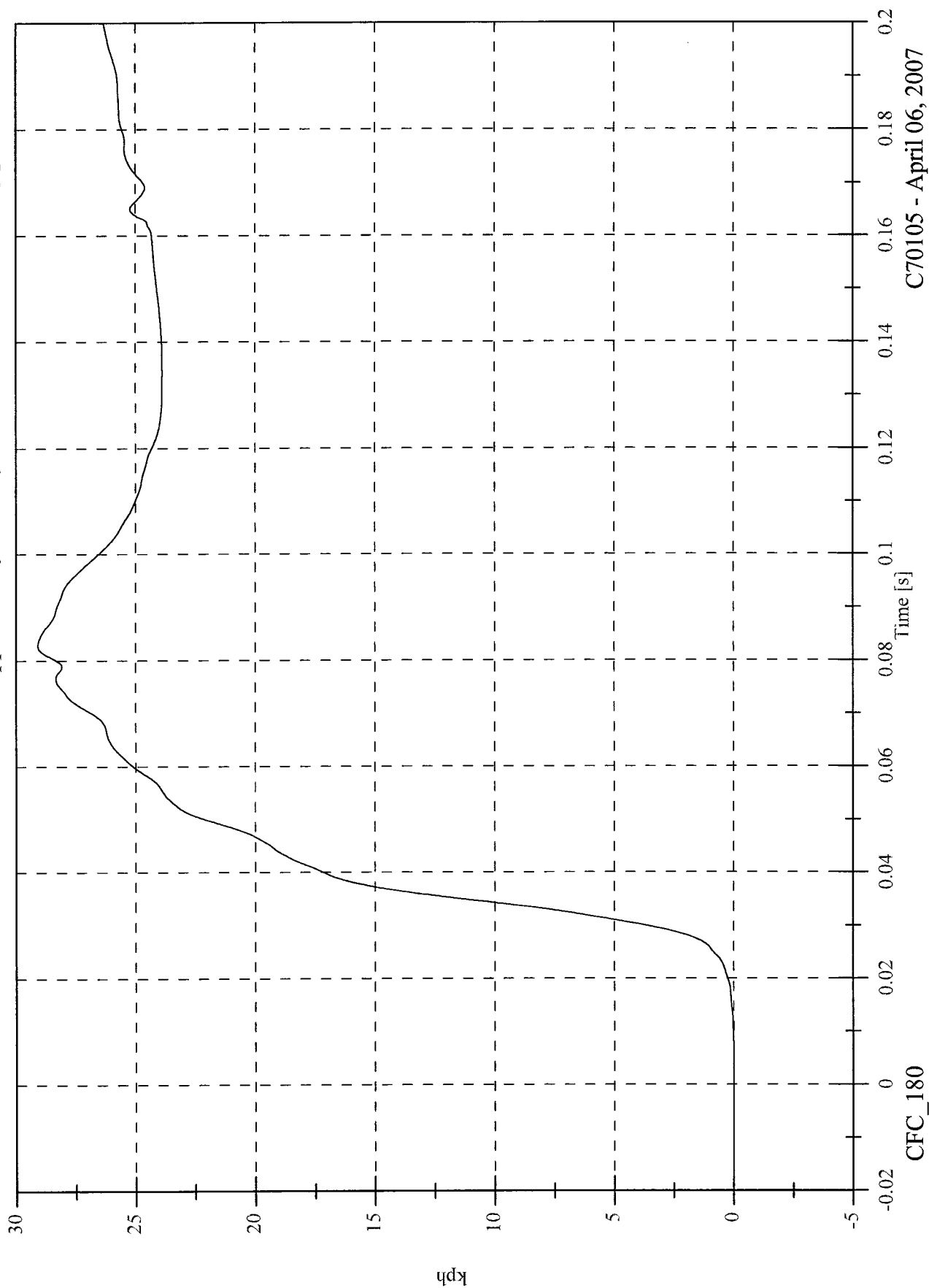
Max: 58.2 [g] at 0.034 [s]
Min: -42.1 [g] at 0.162 [s]



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Max: 29.1 [kph] at 0.083 [s]
Min: -0.0 [kph] at -0.016 [s]

V2P1 Upper Rib Ry Velocity

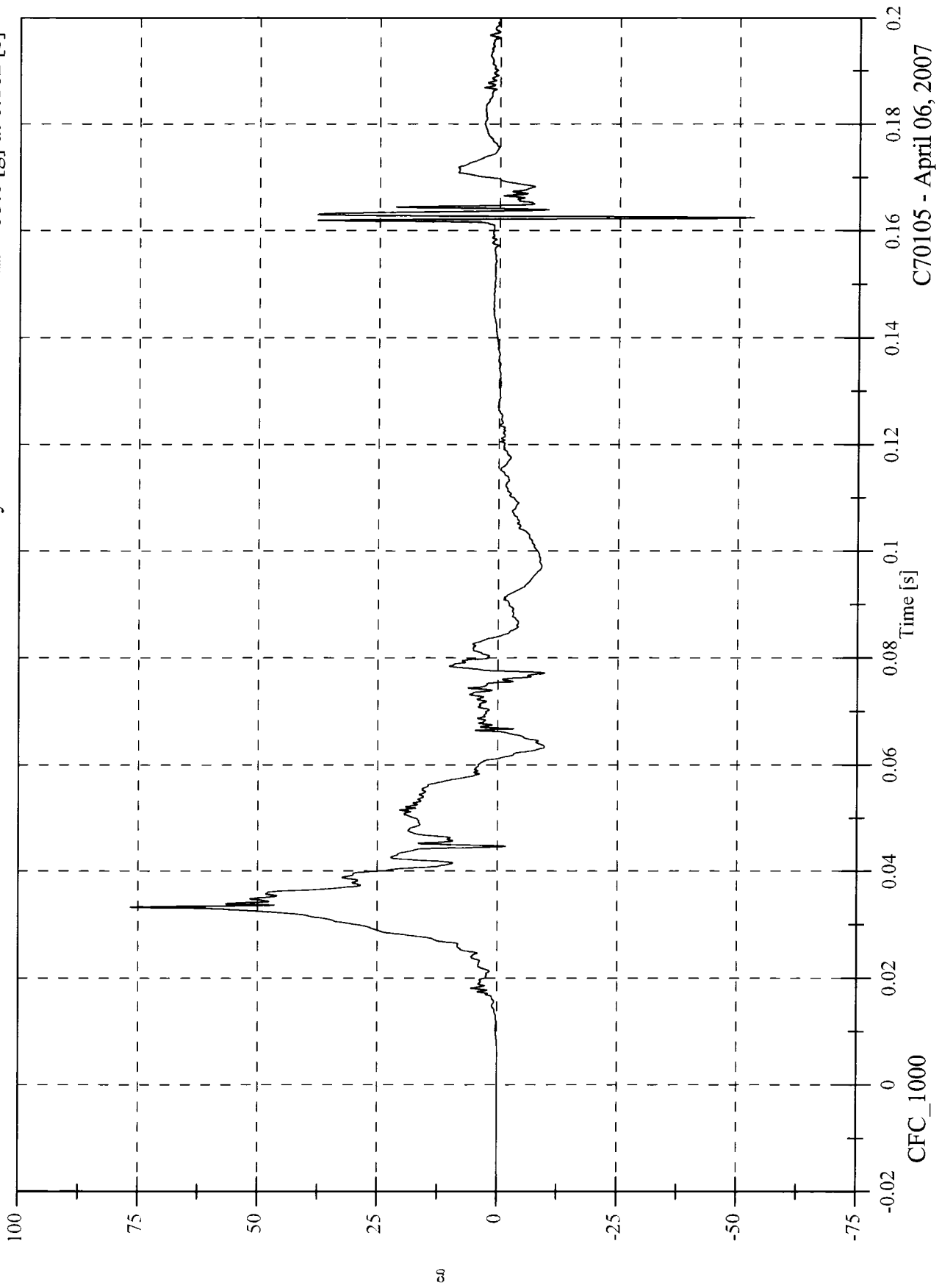


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V2P1 Lower Rib Ry

Max: 76.6 [g] at 0.033 [s]
Min: -53.0 [g] at 0.162 [s]

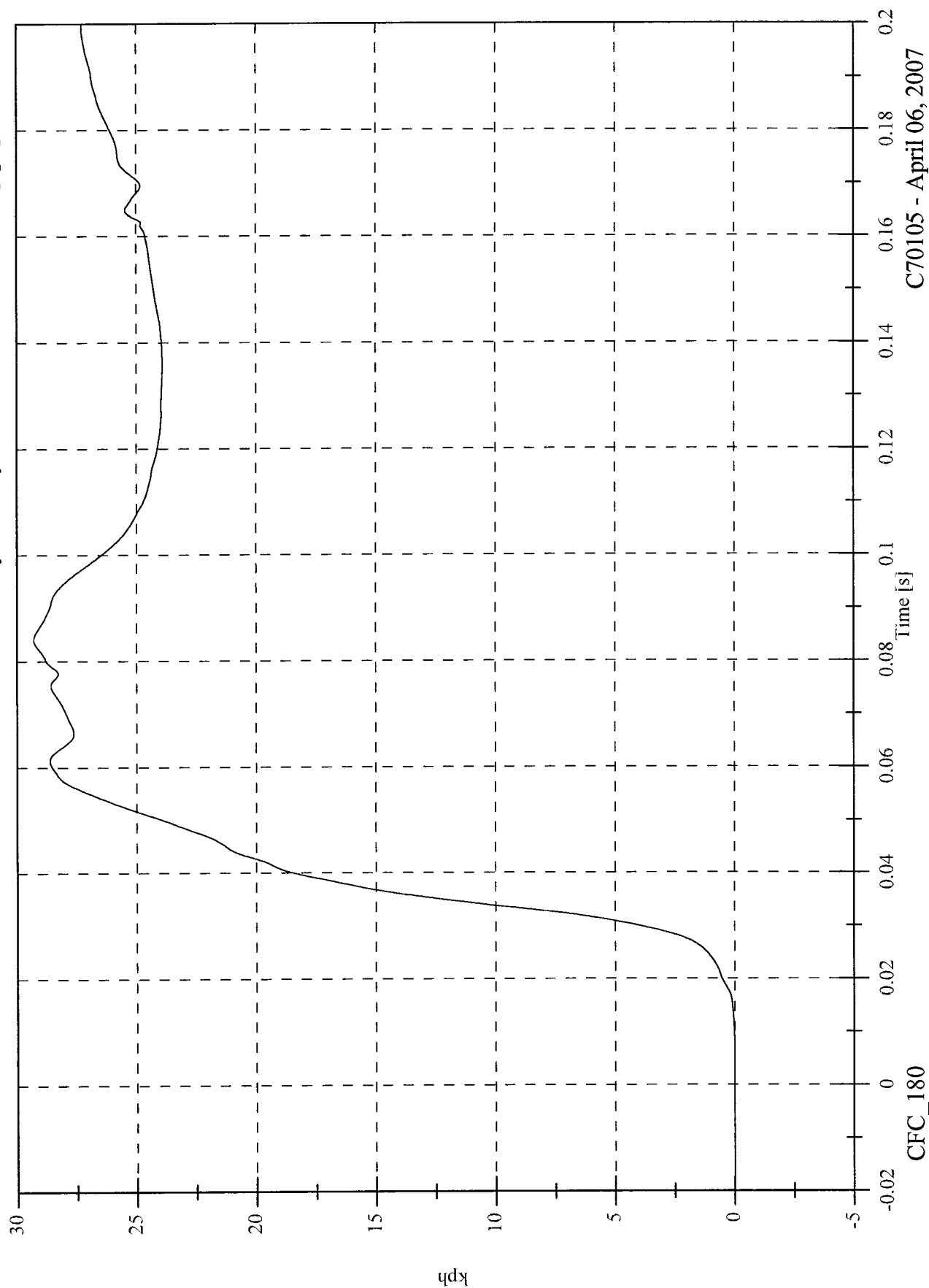


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Max: 29.3 [kph] at 0.084 [s]
Min: -0.0 [kph] at -0.016 [s]

V2P1 Lower Rib Ry Velocity

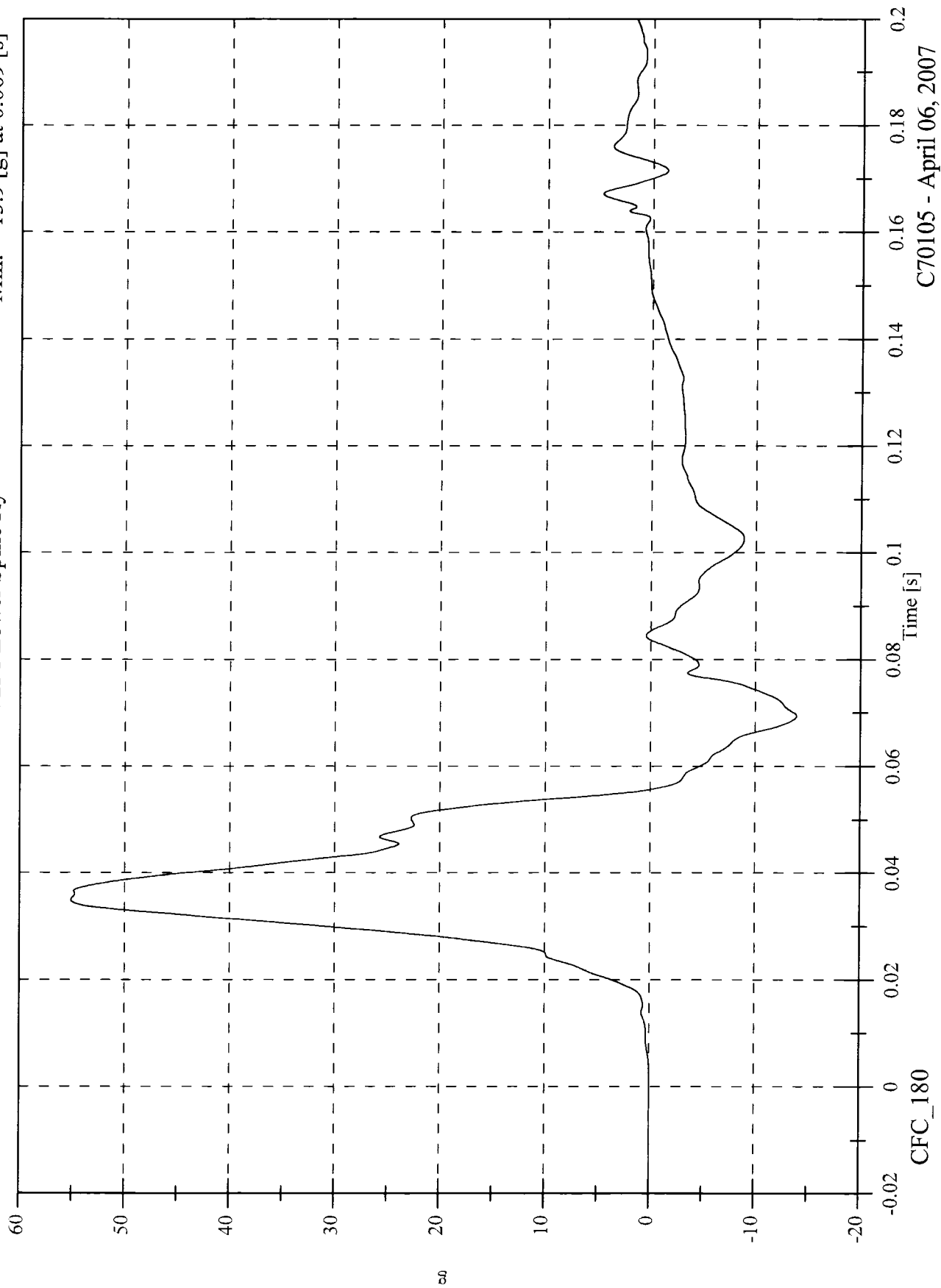


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V2P1 Lower Spine Ry

Max: 55.1 [g] at 0.035 [s]
Min: -13.9 [g] at 0.069 [s]

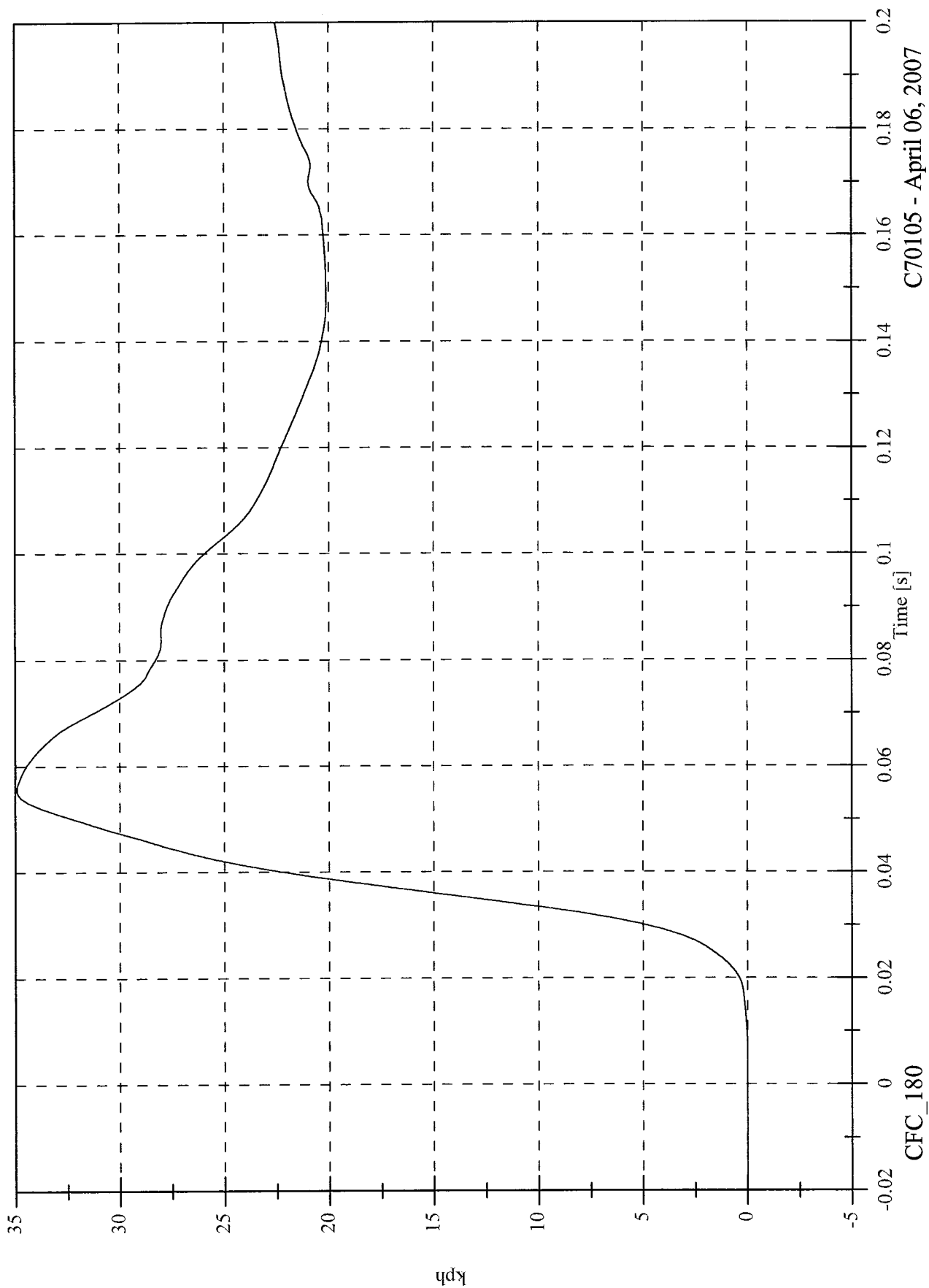


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Max: 34.9 [kph] at 0.056 [s]
Min: -0.0 [kph] at -0.010 [s]

V2P1 Lower Spine Ry Velocity

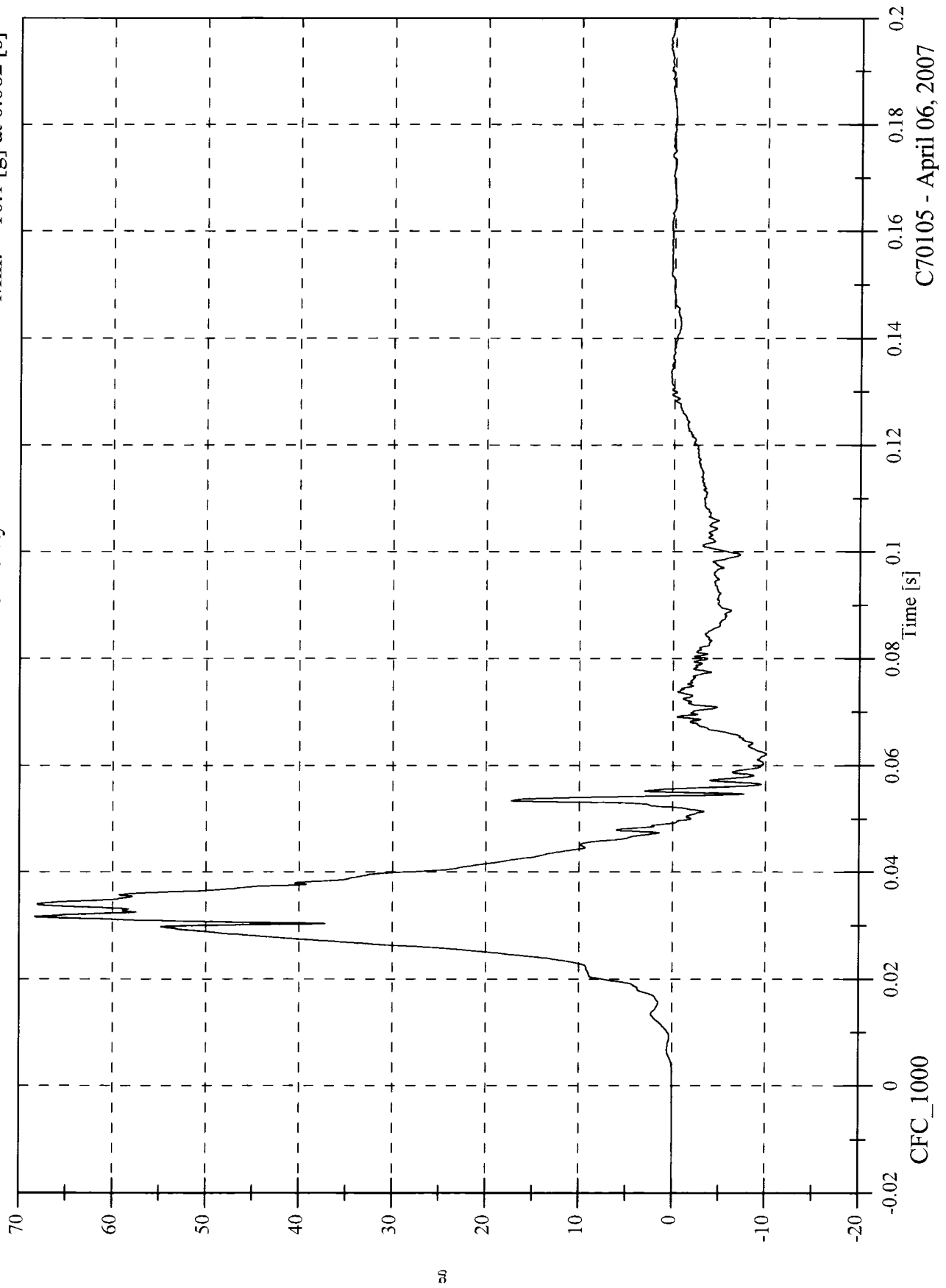


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V2P1 Pelvic Ry

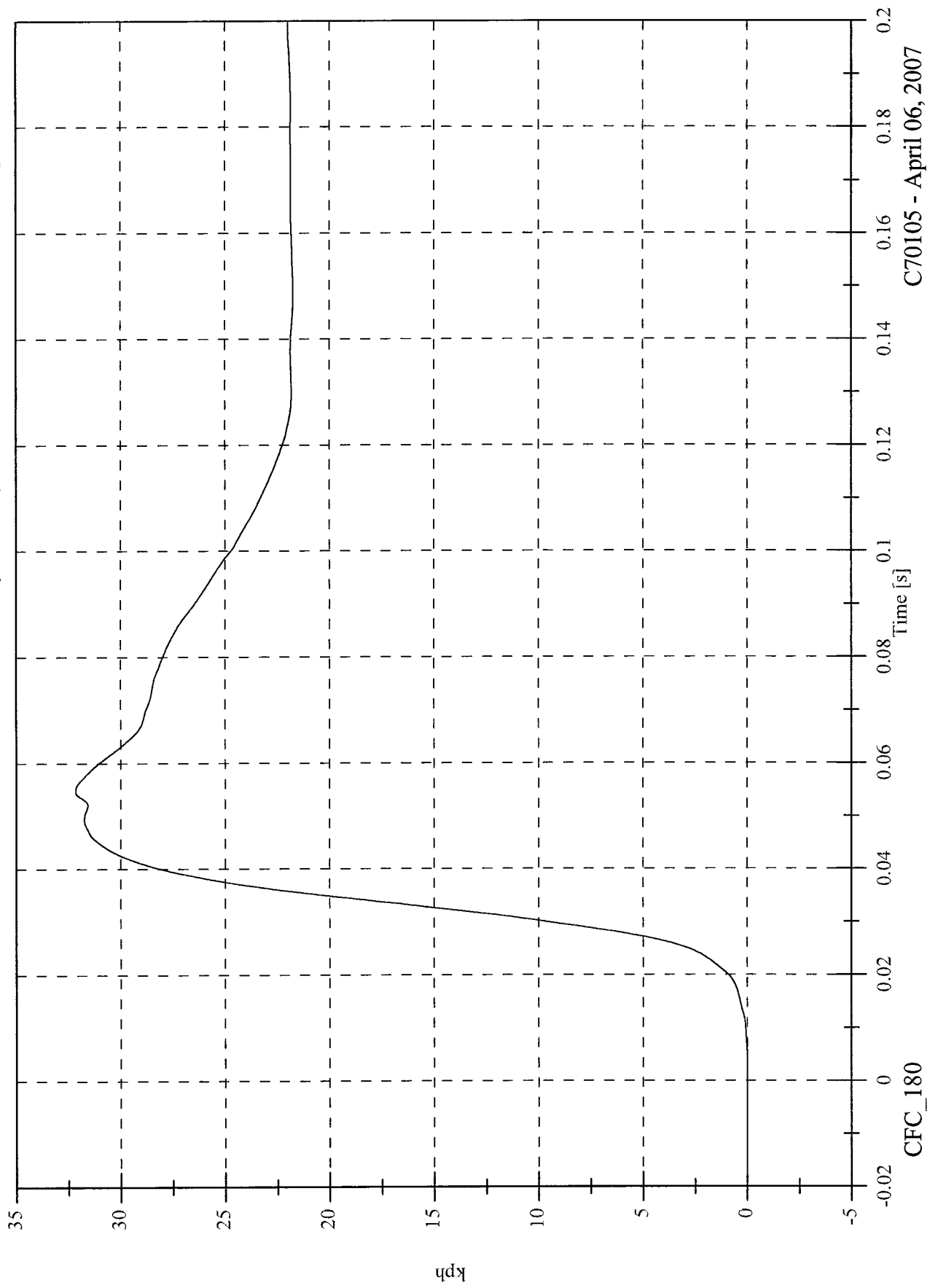
Max: 68.4 [g] at 0.032 [s]
Min: -10.1 [g] at 0.062 [s]



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Max: 32.2 [kph] at 0.055 [s]
Min: -0.0 [kph] at -0.007 [s]

V2P1 Pelvic Ry Velocity

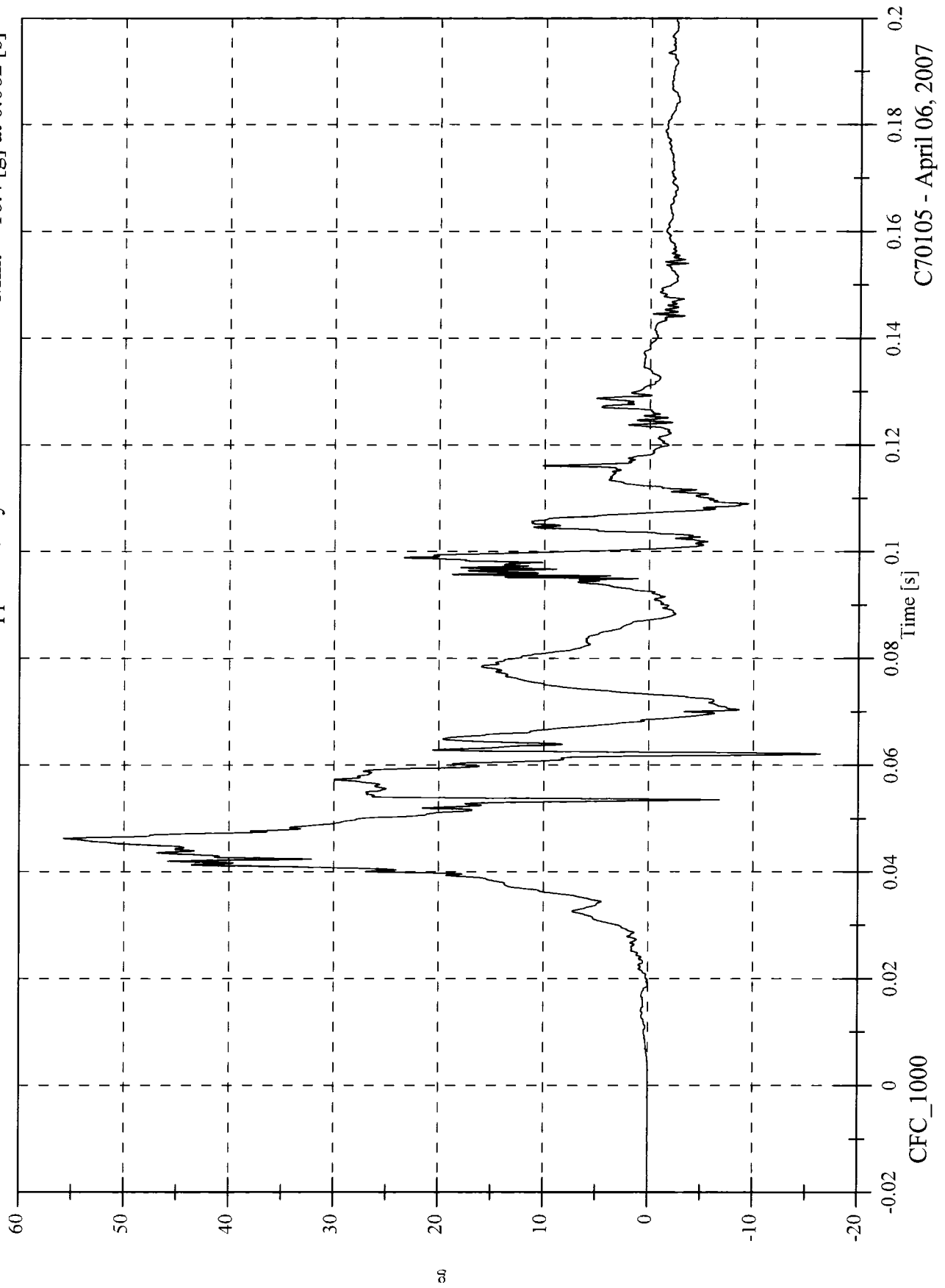


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V2P4 Upper Rib Ry

Max: 55.8 [g] at 0.046 [s]
Min: -16.4 [g] at 0.062 [s]

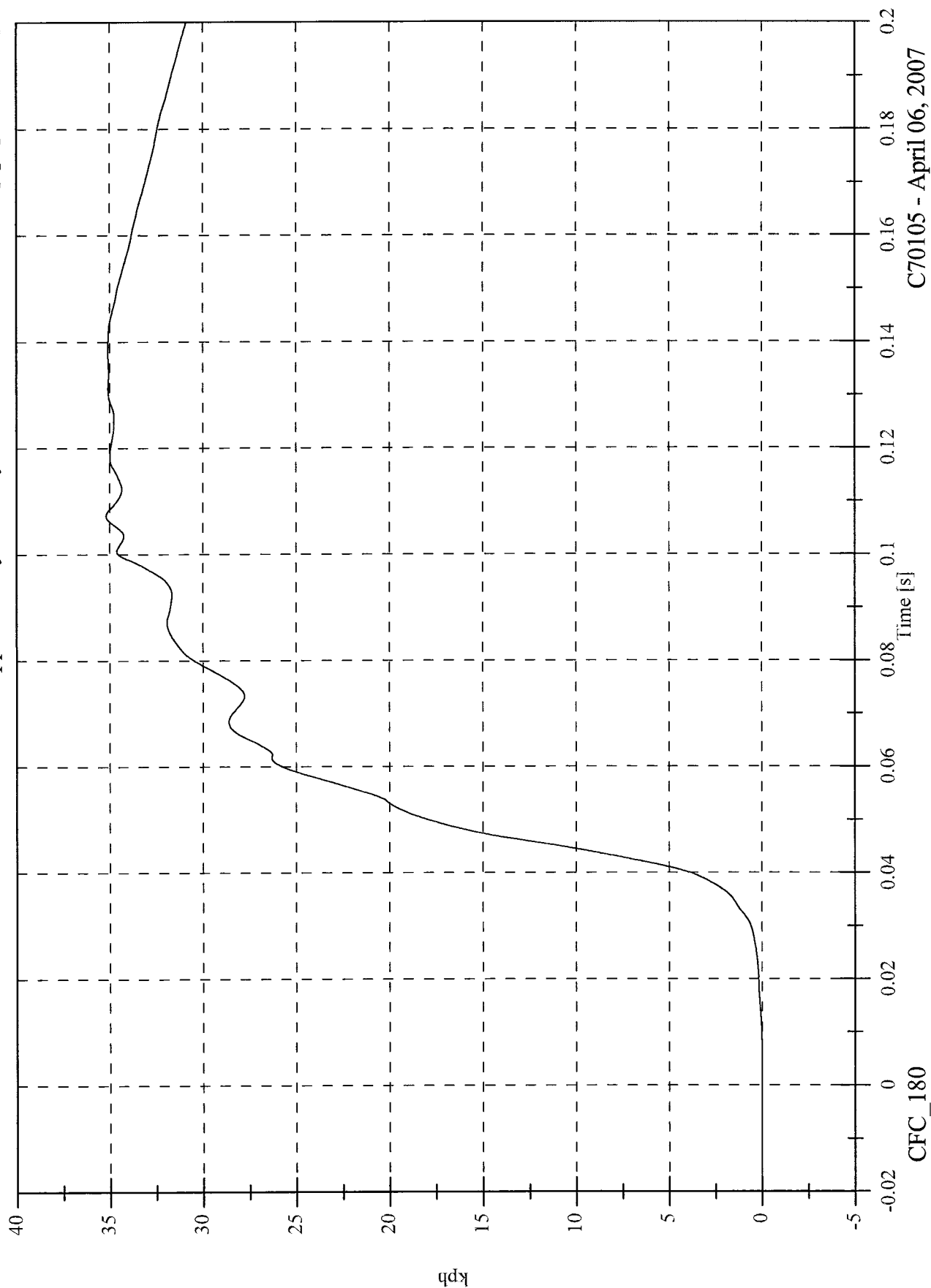


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Max: 35.2 [kph] at 0.107 [s]
Min: -0.0 [kph] at -0.011 [s]

V2P4 Upper Rib Ry Velocity

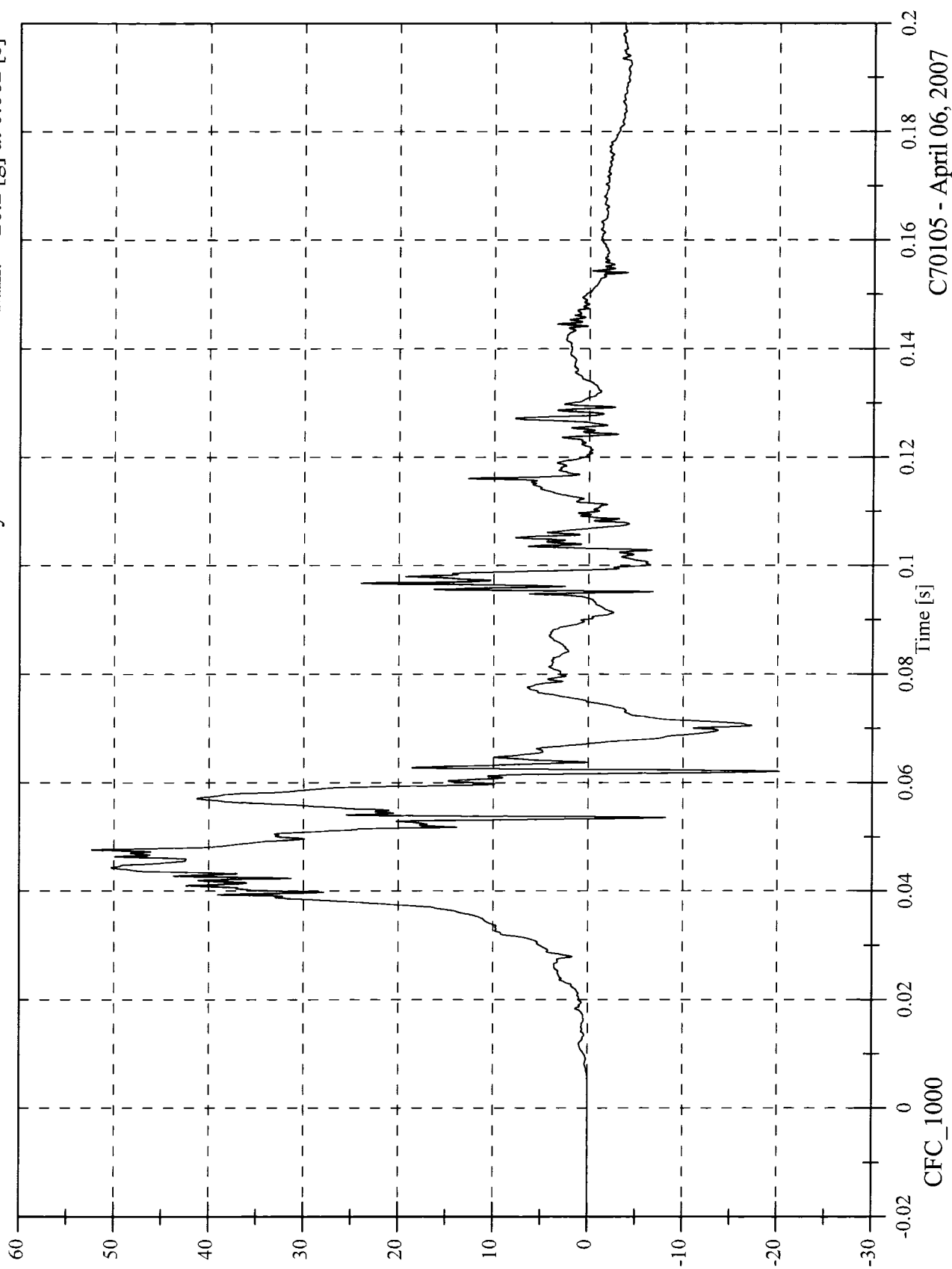


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Max: 52.4 [g] at 0.048 [s]
Min: -20.2 [g] at 0.062 [s]

V2P4 Lower Rib Ry

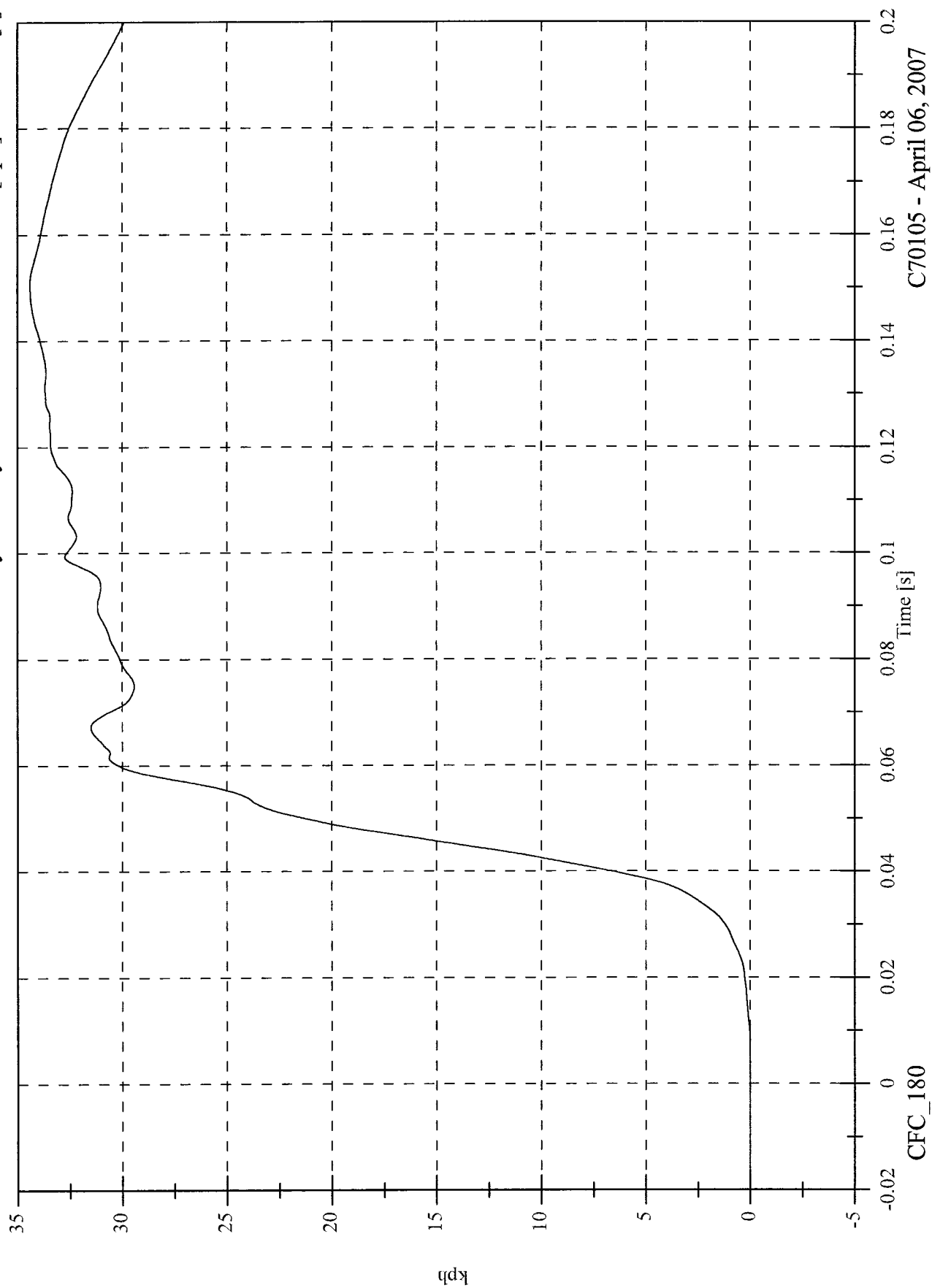


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Max: 34.4 [kph] at 0.151 [s]
Min: -0.0 [kph] at -0.020 [s]

V2P4 Lower Rib Ry Velocity

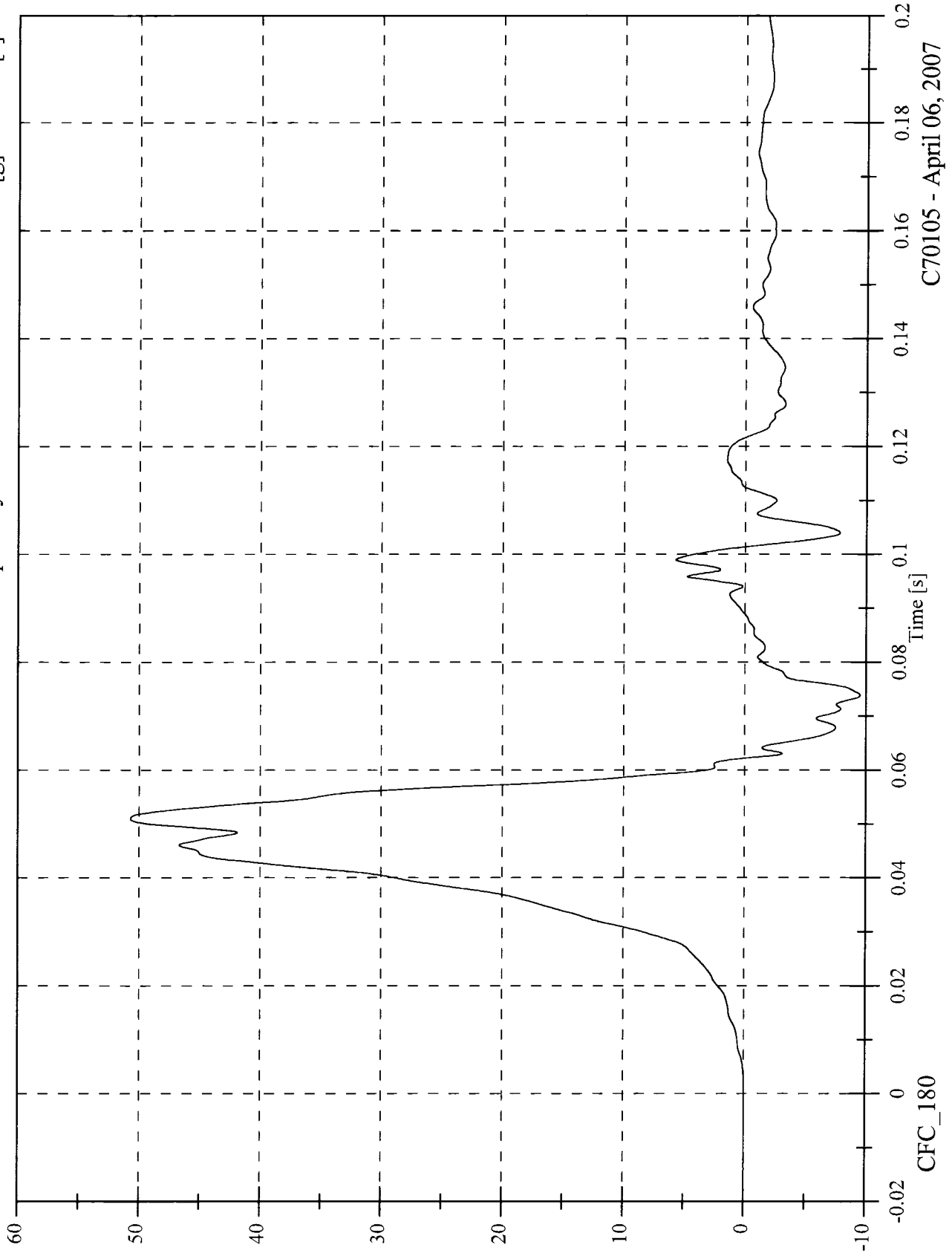


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V2P4 Lower Spine Ry

Max: 50.7 [g] at 0.051 [s]
Min: -9.5 [g] at 0.074 [s]

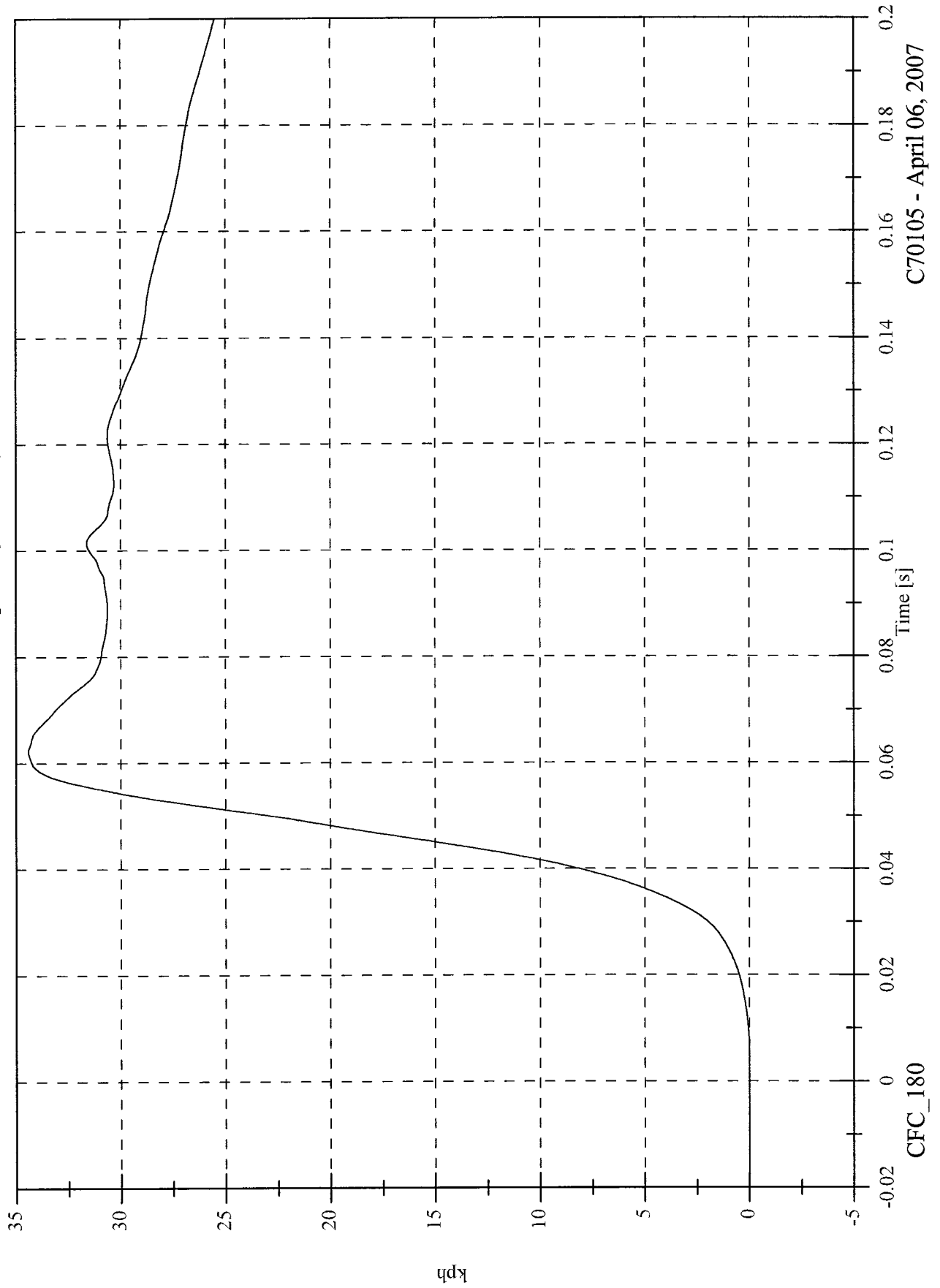


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Max: 34.4 [kph] at 0.062 [s]
Min: -0.0 [kph] at -0.020 [s]

V2P4 Lower Spine Ry Velocity

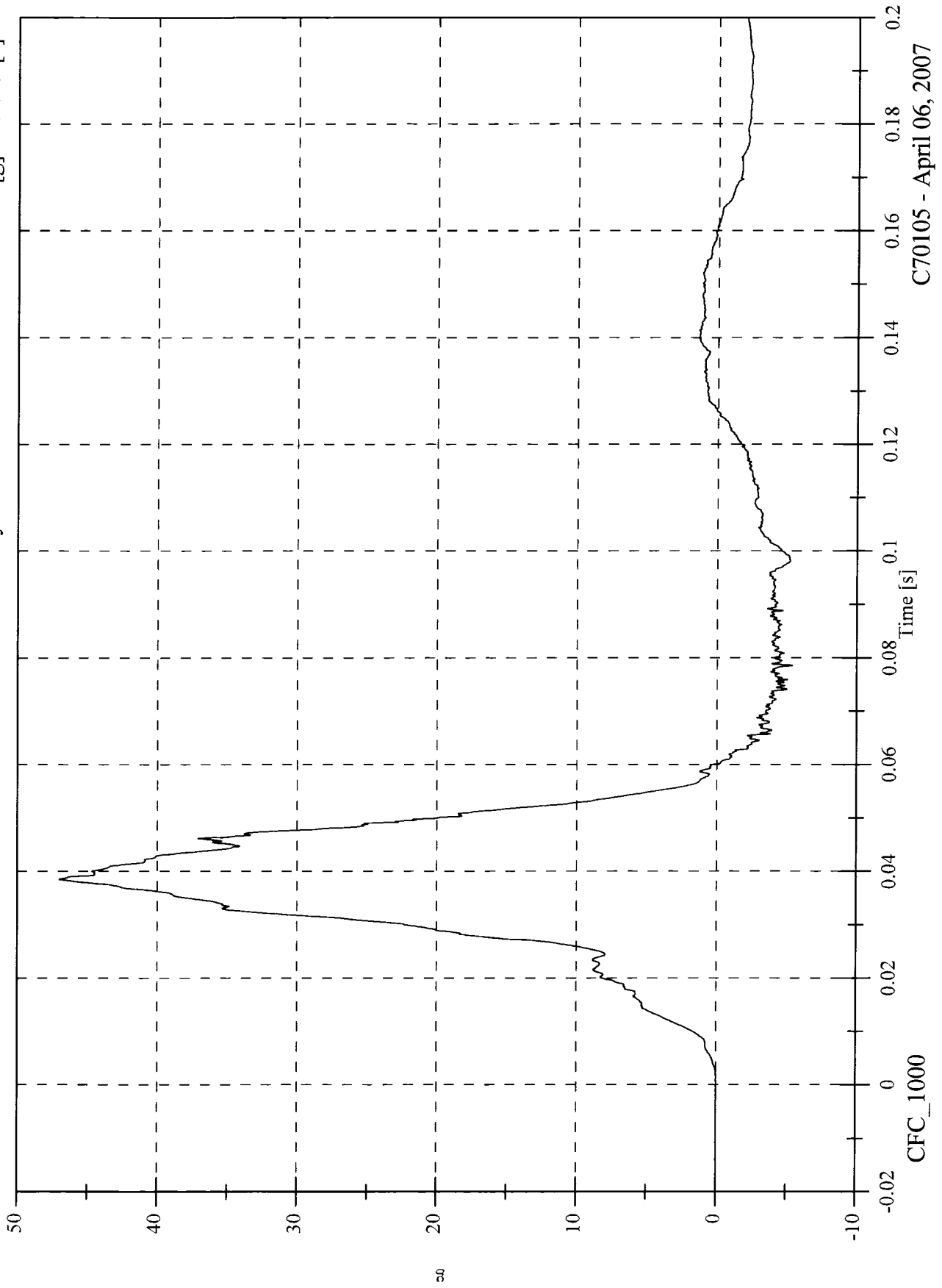


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V2P4 Pelvic Ry

Max: 47.0 [g] at 0.038 [s]
Min: -5.4 [g] at 0.079 [s]

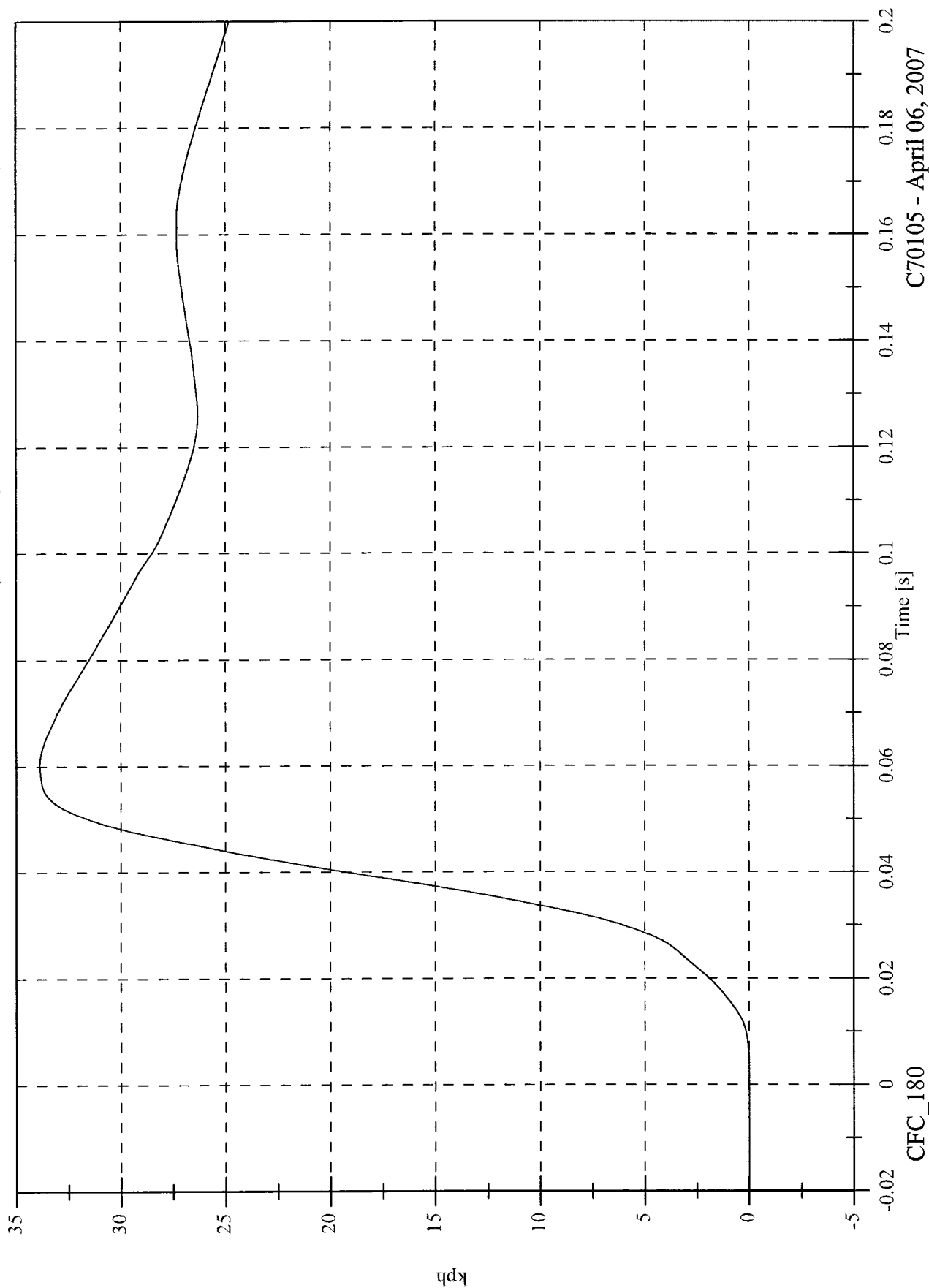


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Max: 33.9 [kph] at 0.060 [s]
Min: -0.0 [kph] at -0.020 [s]

V2P4 Pelvic Ry Velocity

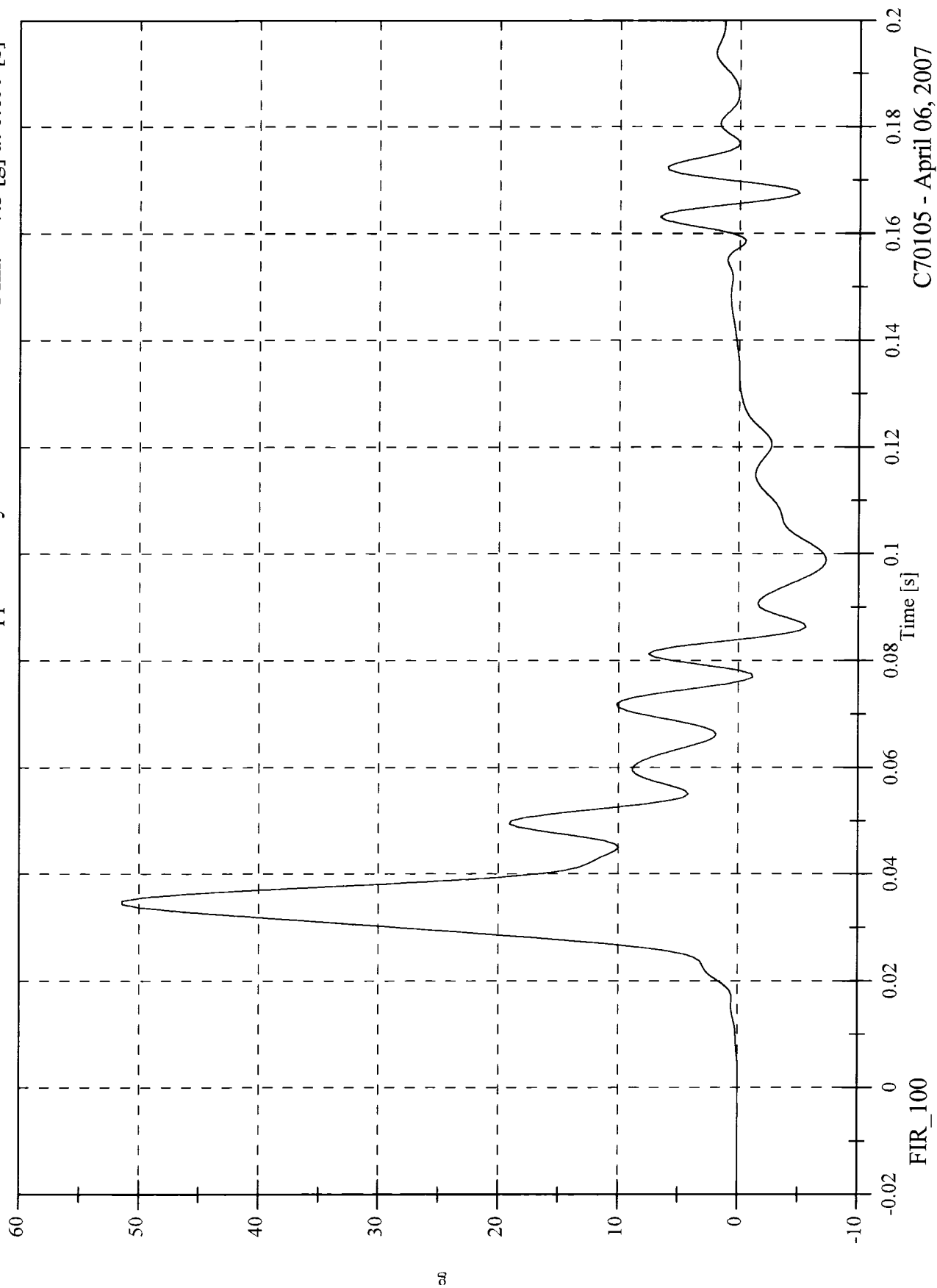


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V2P1 Upper Rib Ry

Max: 51.4 [g] at 0.034 [s]
Min: -7.3 [g] at 0.099 [s]

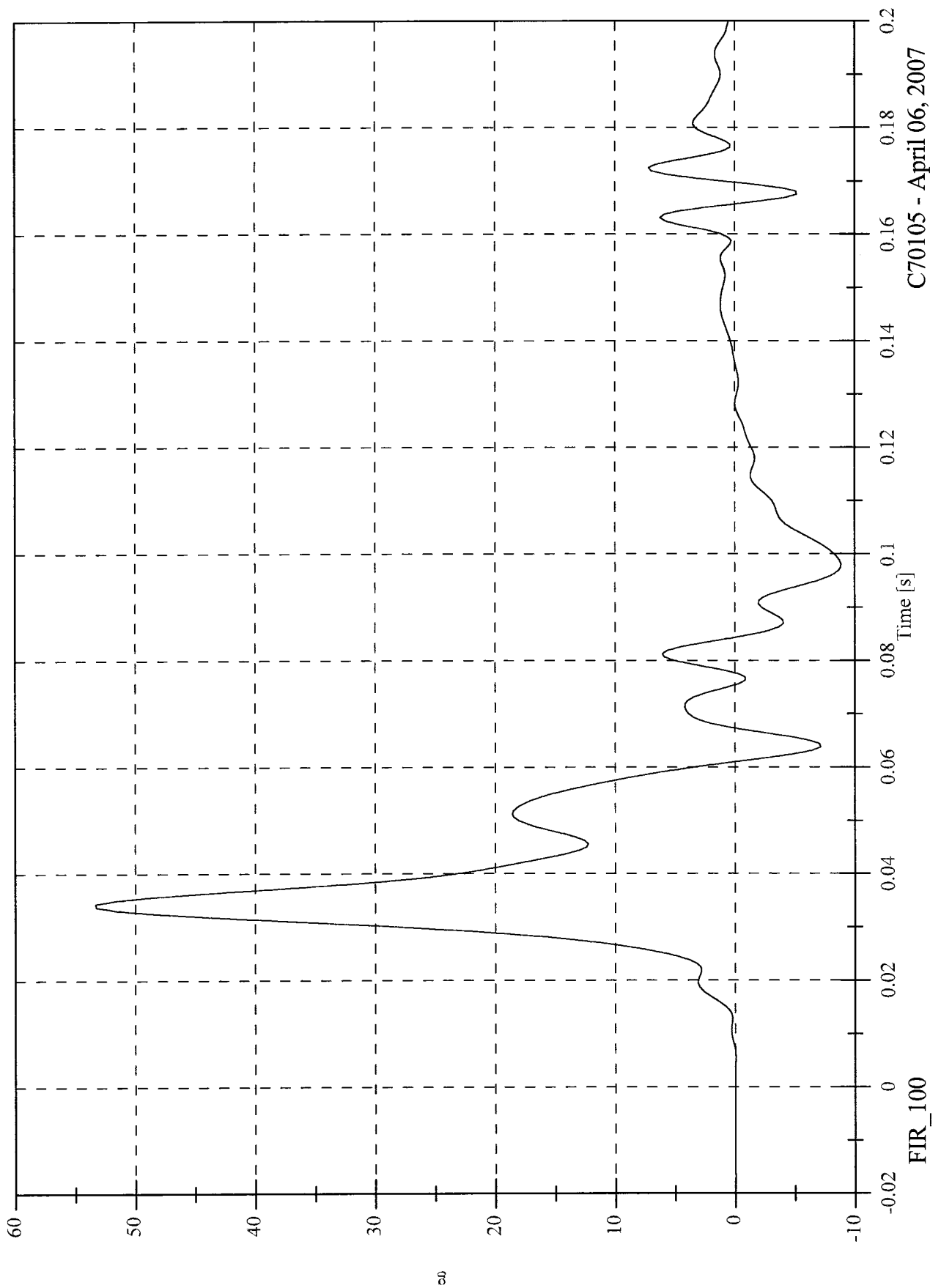


C70105 - April 06, 2007

2007 214D Test 8 2007 Buick Lacrosse

V2P1 Lower Rib Ry

Max: 53.3 [g] at 0.034 [s]
Min: -8.8 [g] at 0.098 [s]

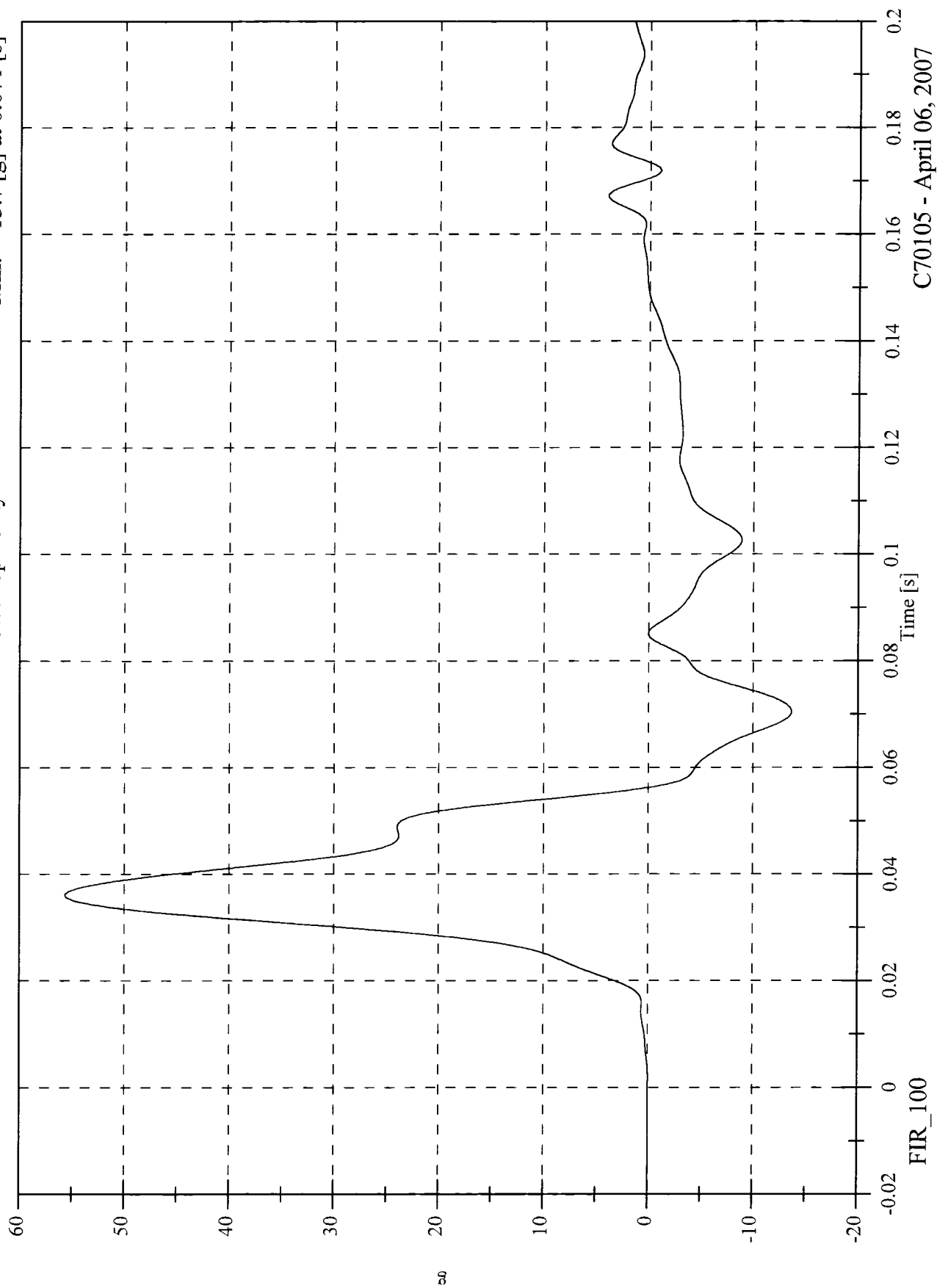


C70105 - April 06, 2007

2007 214D Test 8 2007 Buick Lacrosse

V2P1 Lower Spine Ry

Max: 55.7 [g] at 0.036 [s]
Min: -13.7 [g] at 0.071 [s]

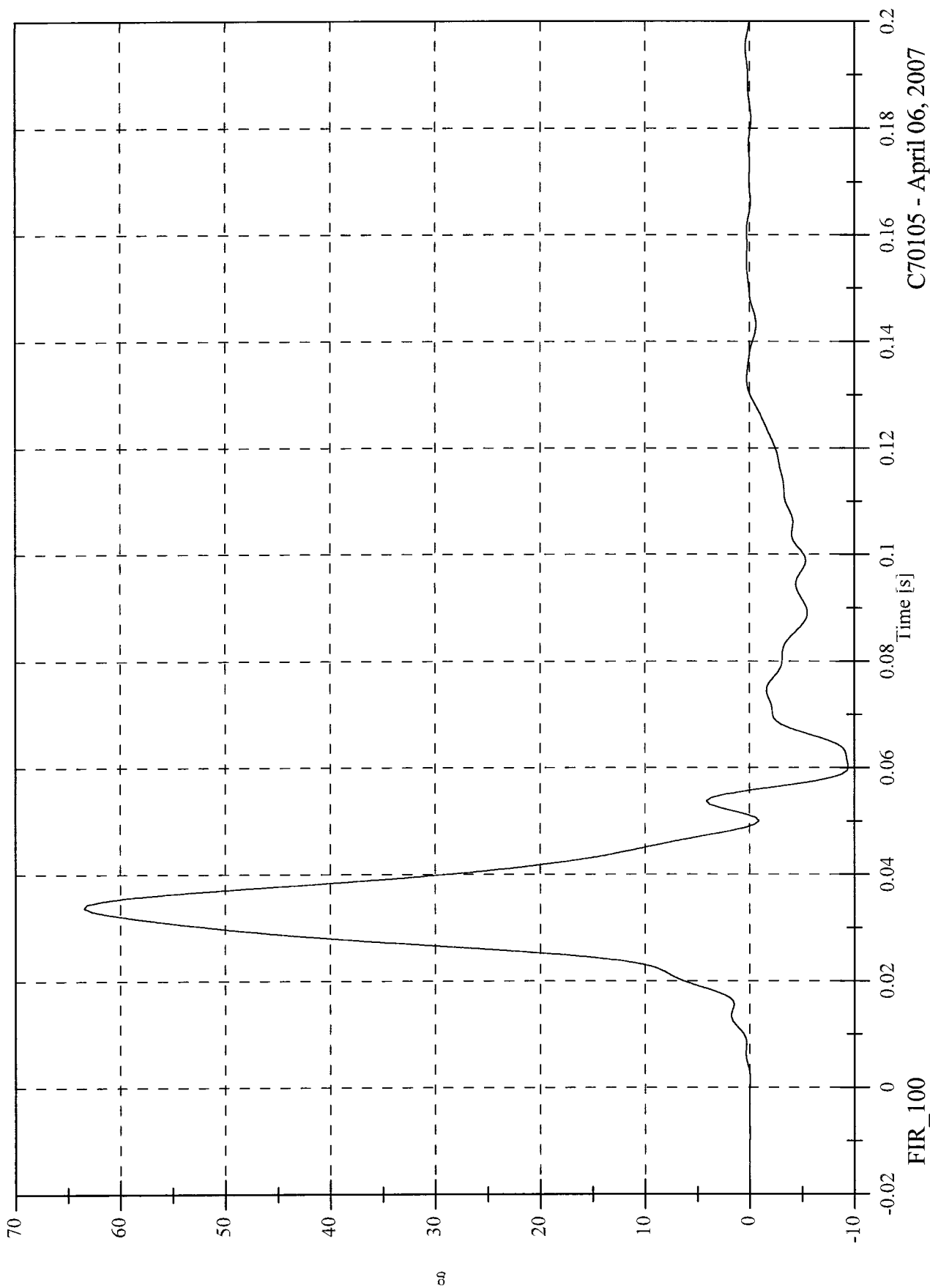


C70105 - April 06, 2007

2007 214D Test 8 2007 Buick Lacrosse

V2P1 Pelvic Ry

Max: 63.4 [g] at 0.034 [s]
Min: -9.4 [g] at 0.060 [s]

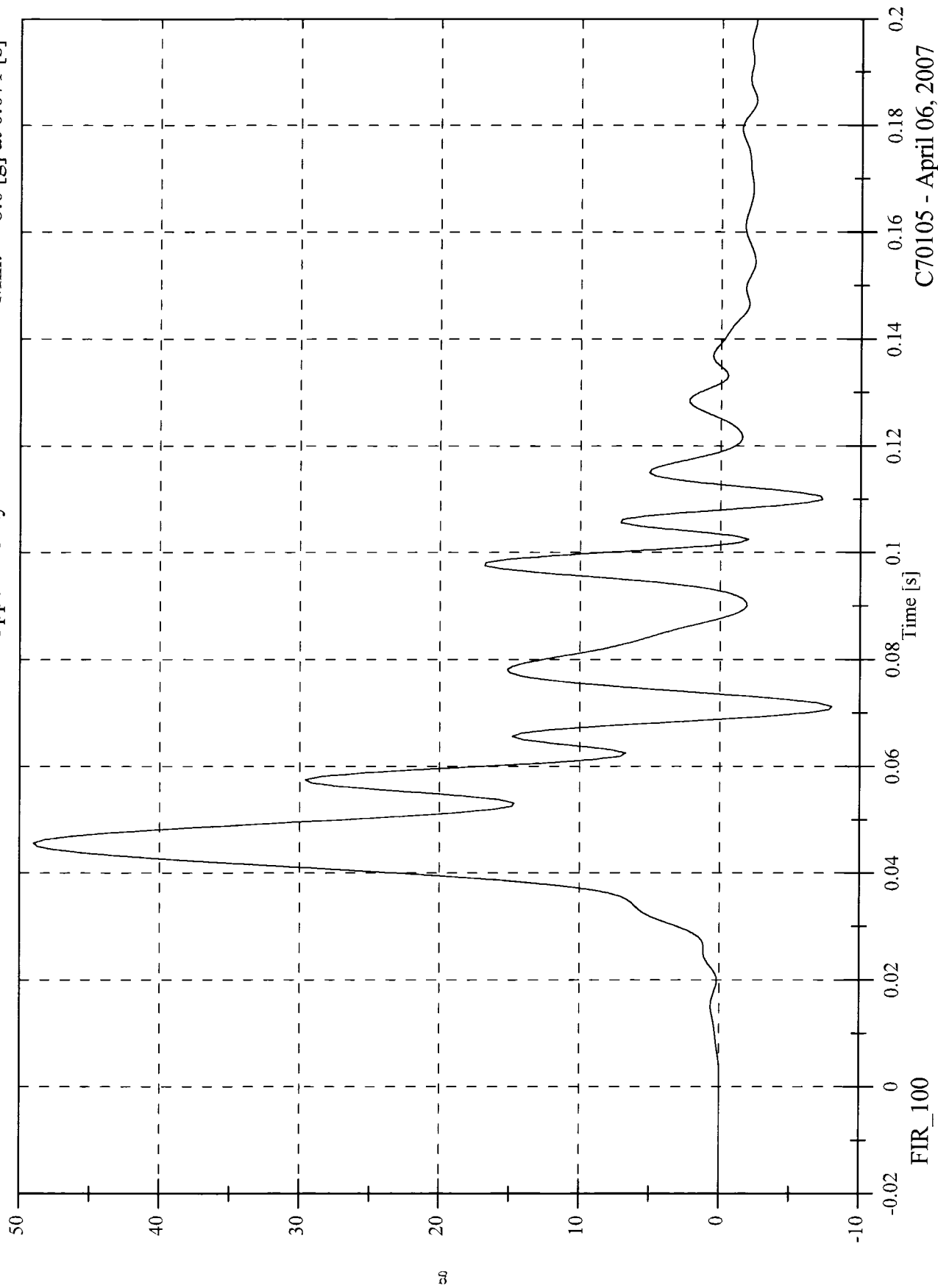


C70105 - April 06, 2007

2007 214D Test 8 2007 Buick Lacrosse

V2P4 Upper Rib Ry

Max: 49.0 [g] at 0.046 [s]
Min: -8.0 [g] at 0.071 [s]

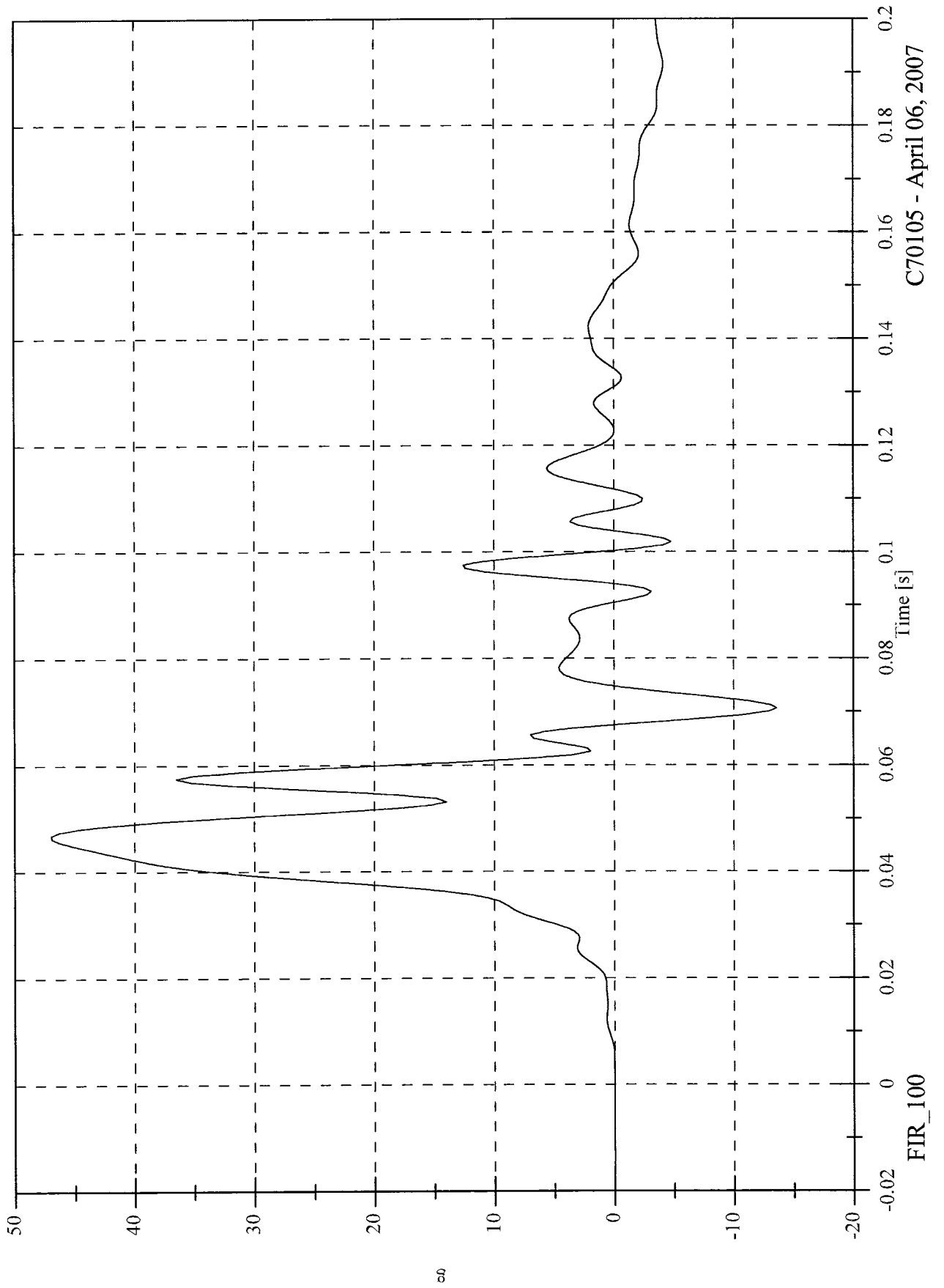


C70105 - April 06, 2007

2007 214D Test 8 2007 Buick Lacrosse

V2P4 Lower Rib Ry

Max: 47.0 [g] at 0.047 [s]
Min: -13.6 [g] at 0.071 [s]

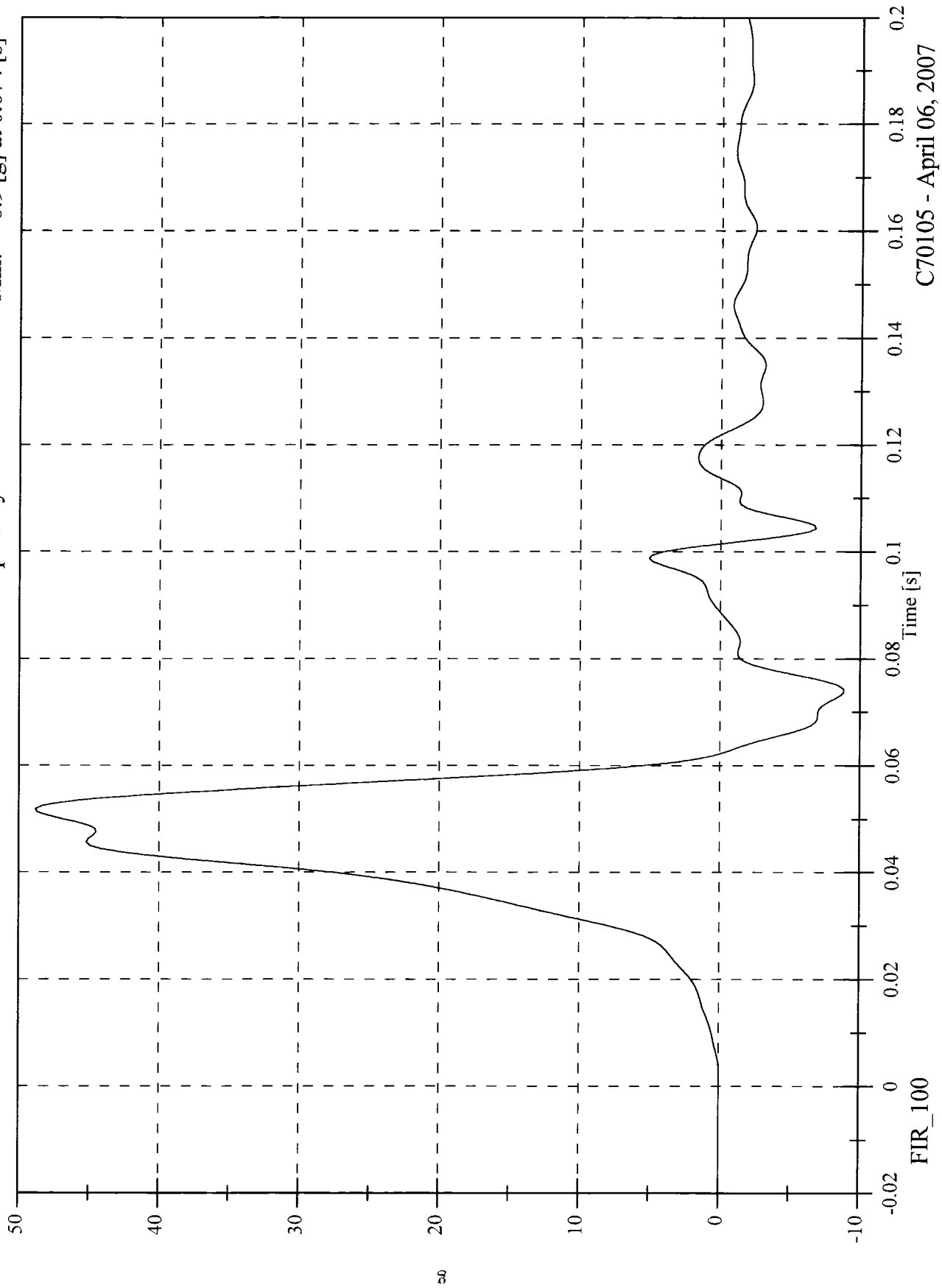


C70105 - April 06, 2007

2007 214D Test 8 2007 Buick Lacrosse

V2P4 Lower Spine Ry

Max: 48.9 [g] at 0.052 [s]
Min: -8.9 [g] at 0.074 [s]

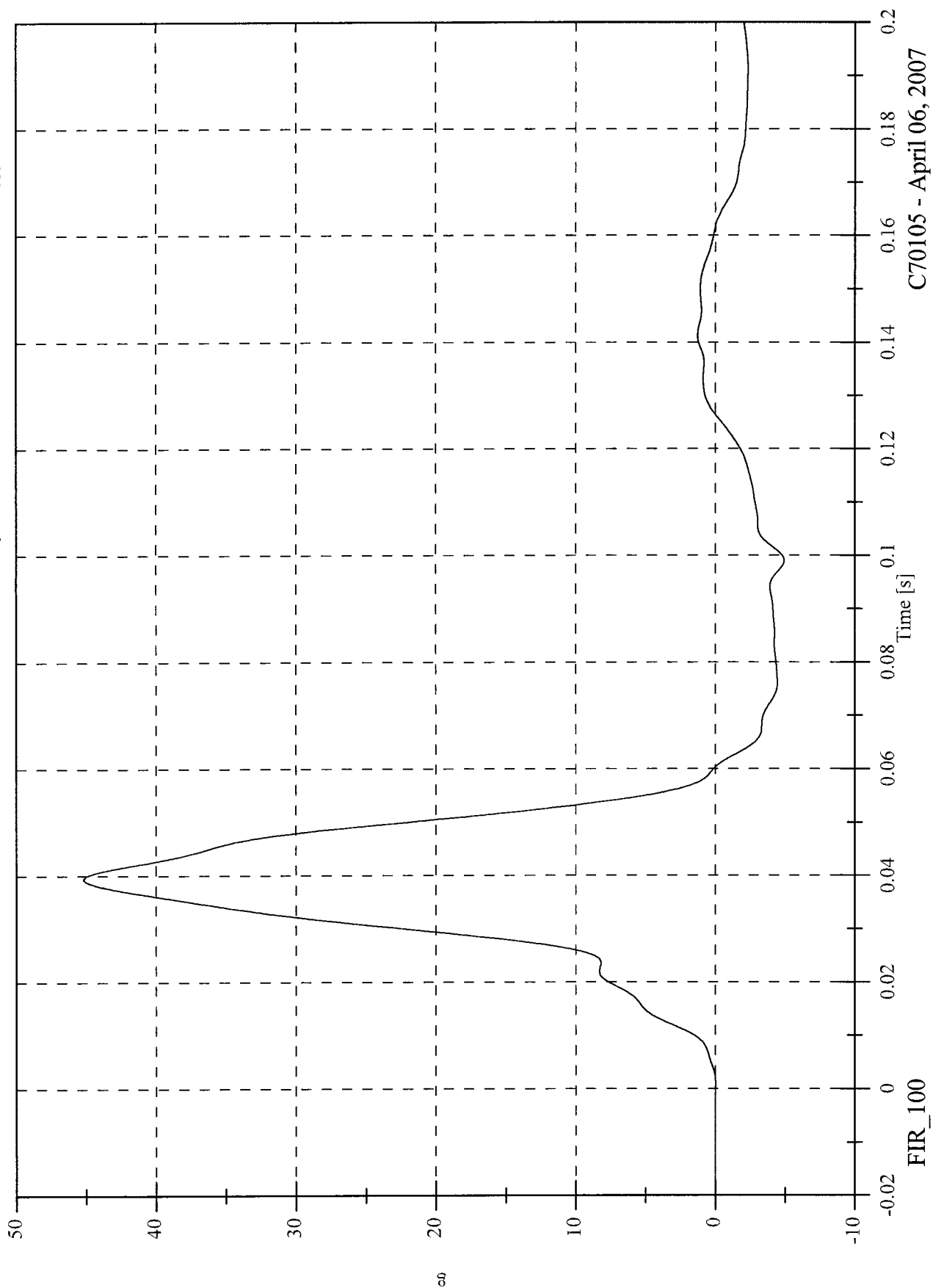


C70105 - April 06, 2007

2007 214D Test 8 2007 Buick Lacrosse

Max: 45.2 [g] at 0.039 [s]
Min: -4.9 [g] at 0.099 [s]

V2P4 Pelvic Ry



C70105 - April 06, 2007

APPENDIX C

SID CONFIGURATION AND PERFORMANCE VERIFICATION DATA

SUMMARY
SID PRE & POST TEST CALIBRATION
CONFIGURED FOR LEFT SIDE IMPACT

Date: 4-2-07 Sequential Test Number: 1
Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	SID NO.: 015		SID NO.: 013	
		PRE TEST	POST TEST	PRE TEST	POST TEST
SH- Seated Height (mm)	889 - 909	902	902	902	902
RH- Rib Height (mm)	501 - 521	511	511	513	513
HP- Hip Pivot Height (mm)	99 ref.	99	99	99	99
RD- Rib from Back Line (mm)	229 - 241	239	239	239	239
KV- Knee Pivot from Back Line (mm)	511 - 526	518	518	518	518
SW- Knee Pivot to Floor (mm)	490 - 505	493	493	493	493
HW- Hip Width (mm)	356 - 391	376	376	378	379
THORAX IMPACTS					
TEMPERATURE (°C)	18.9 - 25.5	21.1	21.1	21.1	21.1
RELATIVE HUMIDITY (%)	10 -70	37	35	37	35
PROBE SPEED (m/s)	4.27 - 4.33	4.33	4.32	4.31	4.33
UPPER RIB (g's)	37 - 46	40.7	41.8	40.2	39.4
LOWER RIB (g's)	37 - 46	39.3	41.2	38.3	38.4
LOWER SPINE (g's)	15 -22	20.0	18.9	18.1	18.0
PELVIS IMPACT					
TEMPERATURE (°C)	18.9 - 25.5	21.1	21.1	21.1	21.1
RELATIVE HUMIDITY (%)	10 - 70	37	35	37	35
PROBE SPEED (m/s)	4.27 - 4.33	4.31	4.29	4.29	4.31
PELVIS (g's)	40 -60	44.0	44.1	44.2	43.0

REMARKS: None

CALIBRATION TEST RESULTS

PRE-TEST

SID NO.: 015

CONFIGURED FOR LEFT SIDE IMPACT

**CALIBRATION TEST RESULTS SUMMARY
PRE-TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 015 Sequential Test Number: 1
Date: 4-2-07 Laboratory Technician: B. Swiecicki

TEST	COMMENTS
EXTERNAL DIMENSIONS	Passed all requirements.
THORACIC SHOCK ABSORBER TEST	Passed all requirements.
LATERAL THORAX IMPACT TEST	Passed all requirements.
LATERAL PELVIS IMPACT TEST	Passed all requirements.
HEAD DROP TEST*	Passed all requirements.
ABDOMINAL COMPRESSION TEST*	Passed all requirements.
LUMBAR FLEXION TEST*	Passed all requirements.

* Test not required for SID certification.

REMARKS: None

**EXTERNAL DIMENSIONS
PRE-TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 015 Sequential Test Number: 1
Date: 4-2-07 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
SH- Seated Height (mm)	889 – 909	902
RH- Rib Height (mm)	502 – 520	511
HP- Hip Pivot Height (mm)	99 ref.	99
RD- Rib from Back Line (mm)	229 – 241	239
KH- Knee Pivot from Back Line (mm)	511 – 526	518
KV- Knee Pivot to Floor (mm)	490 – 505	493
HW- Hip Width (mm)	356 - 391	376

REMARKS: None

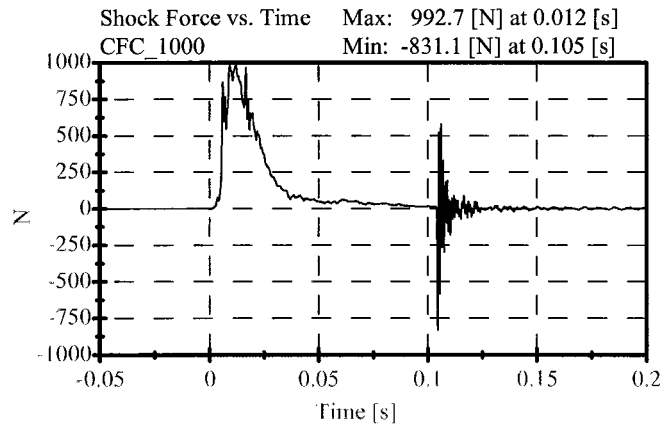
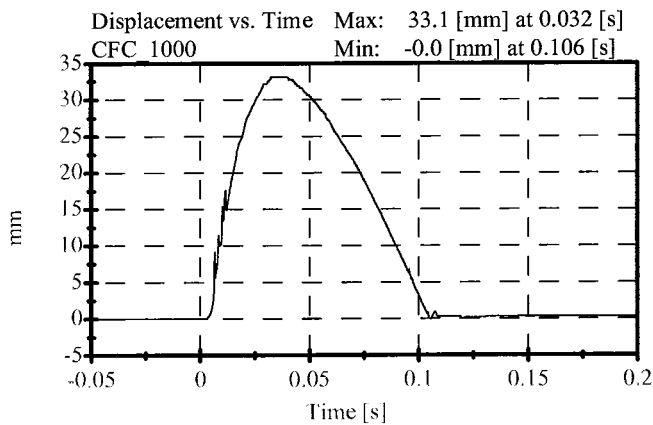
Shock Low (4.27 m/s)
PRE TEST
CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 015
Date: 03-22-07

Sequential Test Number: 1 File: 015 SL2 03-22-07
Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	36.00 %	Passed
Displacement:	32.00-37.00 mm	33.10 mm	Passed
Maximum Force:	1730.00-2099.00 N	992.69 N	Failed

Impact Test Velocity: 4.27 m/s
Damper Identification: 015
Damper Setting: 5



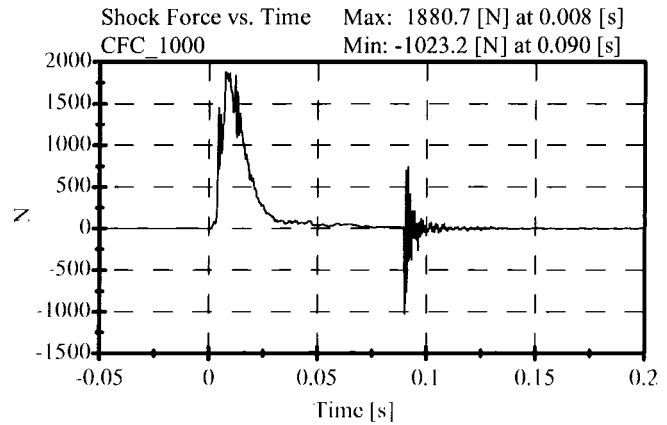
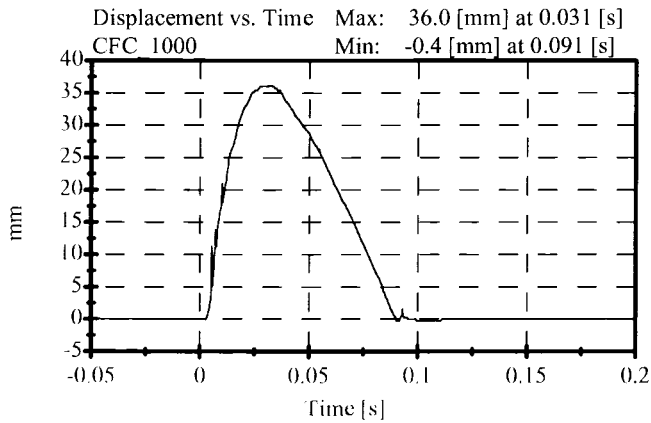
Shock Med (4.27 m/s)
PRE TEST
CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 015
Date: 03-22-07

Sequential Test Number: 1 File: 015 SM 03-22-07
Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	36.00 %	Passed
Displacement:	32.00-37.00 mm	36.04 mm	Passed
Maximum Force:	1730.00-2099.00 N	1880.70 N	Passed

Impact Test Velocity: 4.27 m/s
Damper Identification: 015
Damper Setting: 5



Shock High (6.10 m/s)

PRE TEST

CONFIGURED FOR LEFT SIDE IMPACT

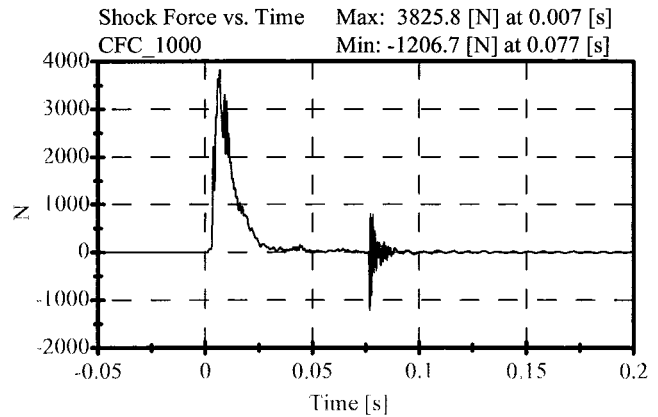
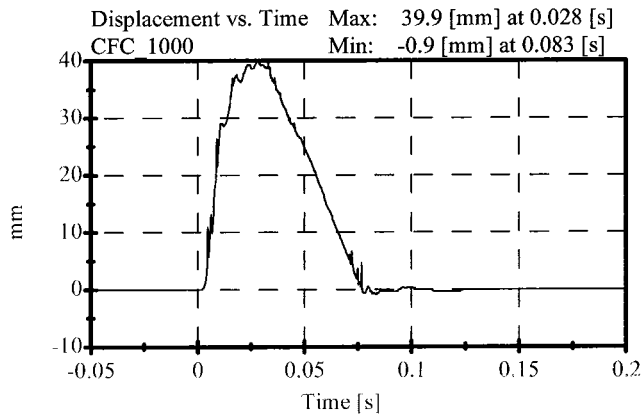
ATD Serial No: 015

Date: 03-22-07

Sequential Test Number: 1 File: 015 SH 03-22-07

Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	36.00 %	Passed
Displacement:	33.00-40.00 mm	39.90 mm	Passed
Maximum Force:	3741.00-4448.00 N	3825.80 N	Passed
Impact Test Velocity:	6.10 m/s		
Damper Identification:	015		
Damper Setting:	5		

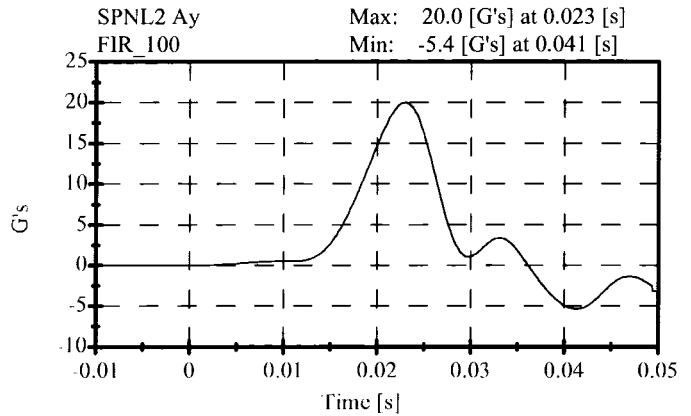
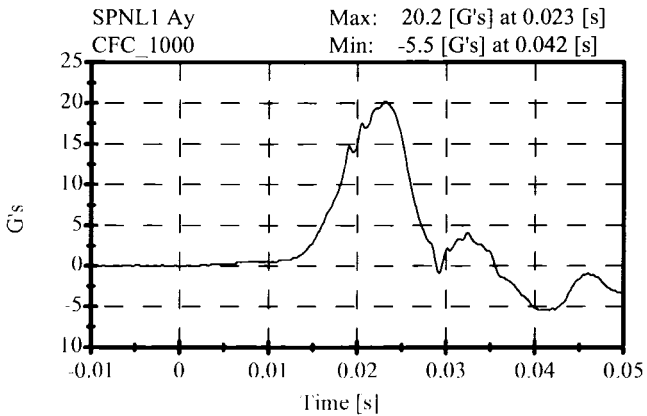
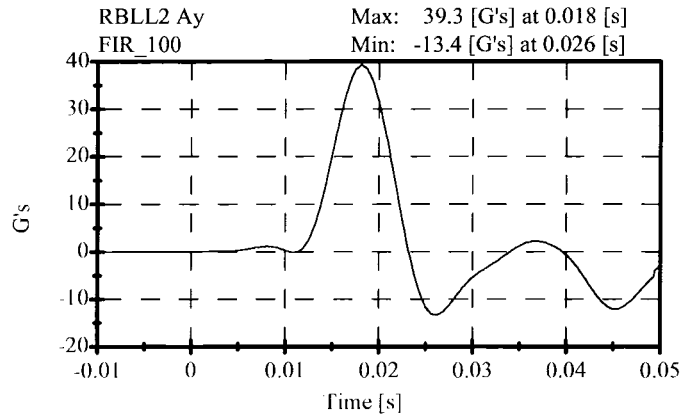
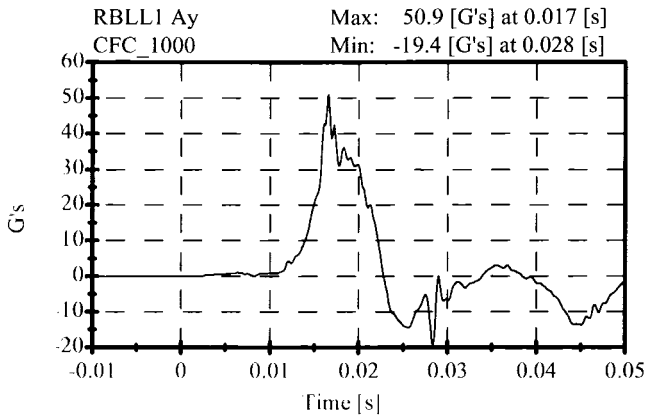
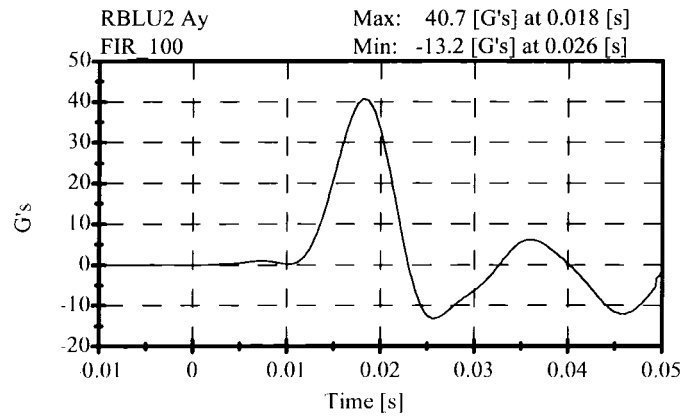
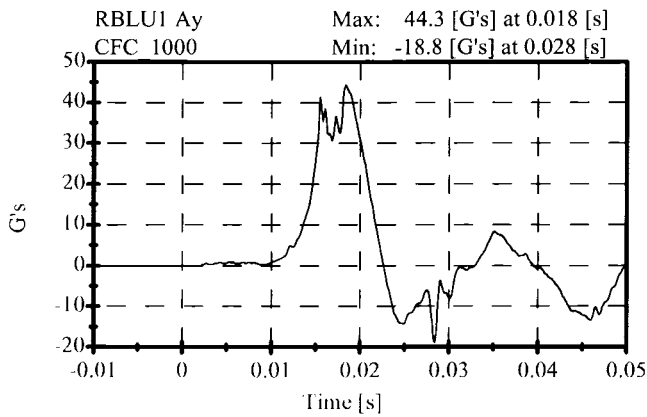


Thorax Impact
Pre-Test
CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 015
Date: 04-02-07

Sequential Test Number: 1 File: 015T2 04-02-07
Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	37.00 %	Passed
Probe Velocity:	4.27- 4.33 m/s	4.33 m/s	Passed
Upper Rib Acceleration:	37.00-46.00 G's	40.71 G's	Passed
Lower Rib Acceleration:	37.00-46.00 G's	39.34 G's	Passed
Lower Spine Acceleration:	15.00-22.00 G's	20.02 G's	Passed



Pelvic Impact

Pre-Test

CONFIGURED FOR LEFT SIDE IMPACT

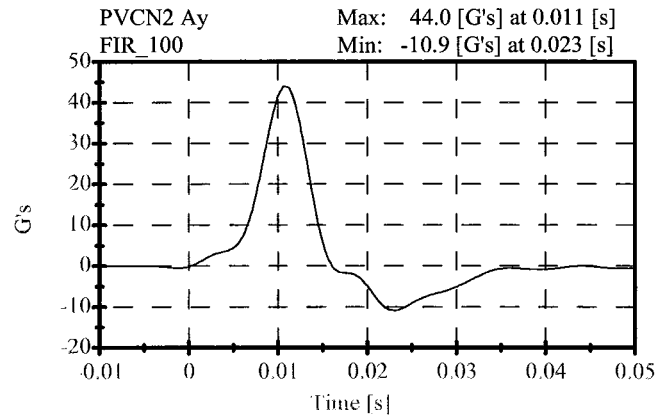
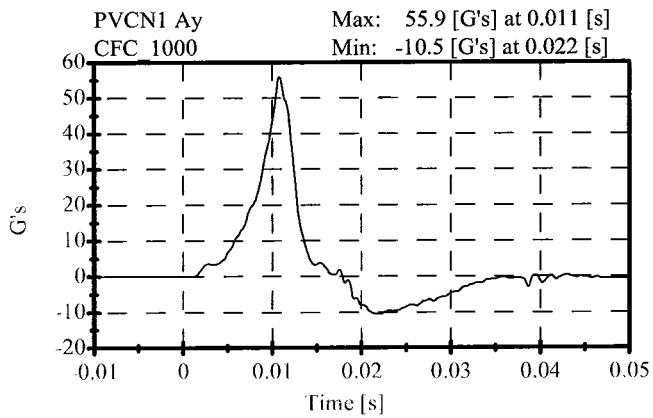
ATD Serial No: 015

Date: 04-02-07

Sequential Test Number: 1 File: 015P 04-02-07

Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	37.00 %	Passed
Probe Velocity:	4.27- 4.33 m/s	4.31 m/s	Passed
Pelvis Y Acceleration:	40.00-60.00 G's	44.03 G's	Passed
Time Above 20 Gs	3.0-7.0 ms	5.9 ms	Passed



Head Drop

Pre-Test

CONFIGURED FOR LEFT SIDE IMPACT

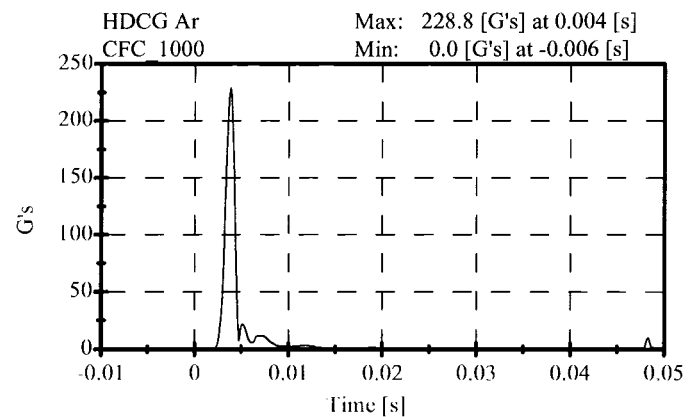
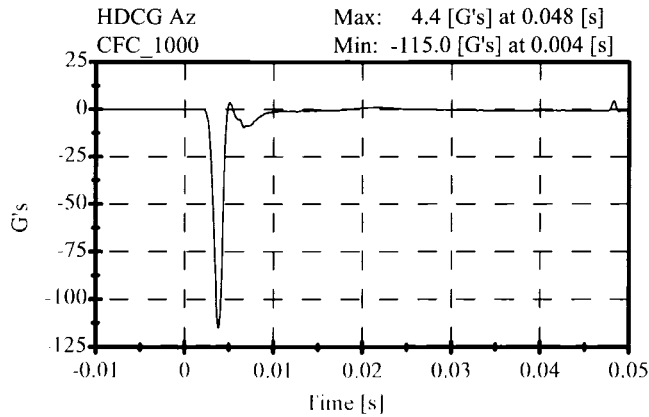
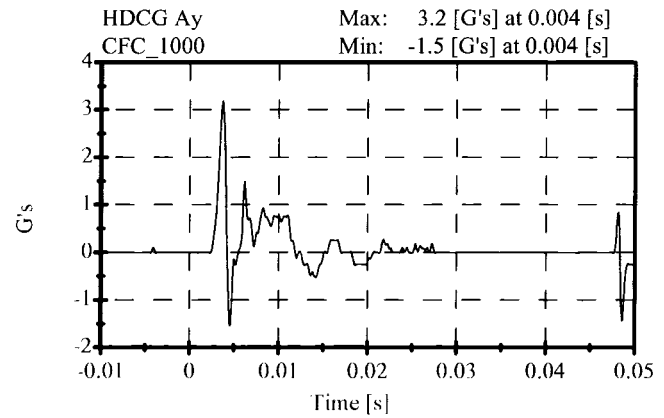
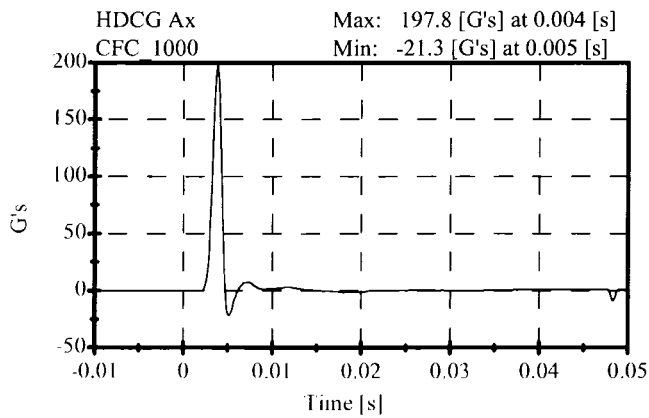
ATD Serial No: 015

Date: 04-02-07

Sequential Test Number: 1 File: 015HD1 04-02-07

Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.6 C	21.1 C	Passed
Lab Humidity:	10-70 %	35.00 %	Passed
Peak Resultant Accel.:	210-260 Gs	228.80 Gs	Passed
Peak Lateral Accel.:	10 Gs Max	3.18 Gs	Passed
Unimodal Criteria Above 100 Gs:	0.9-1.5 ms	1.18 ms	Passed
Curve PerCent NonModal:	< 10%	9.46 %	Passed



Abdomen Test

Pre-Test

CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 015

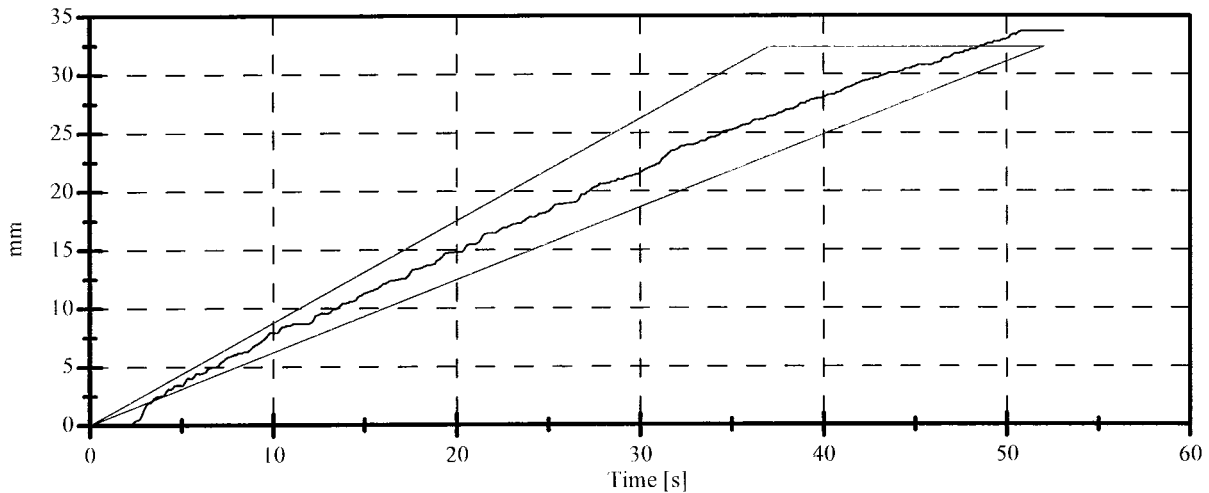
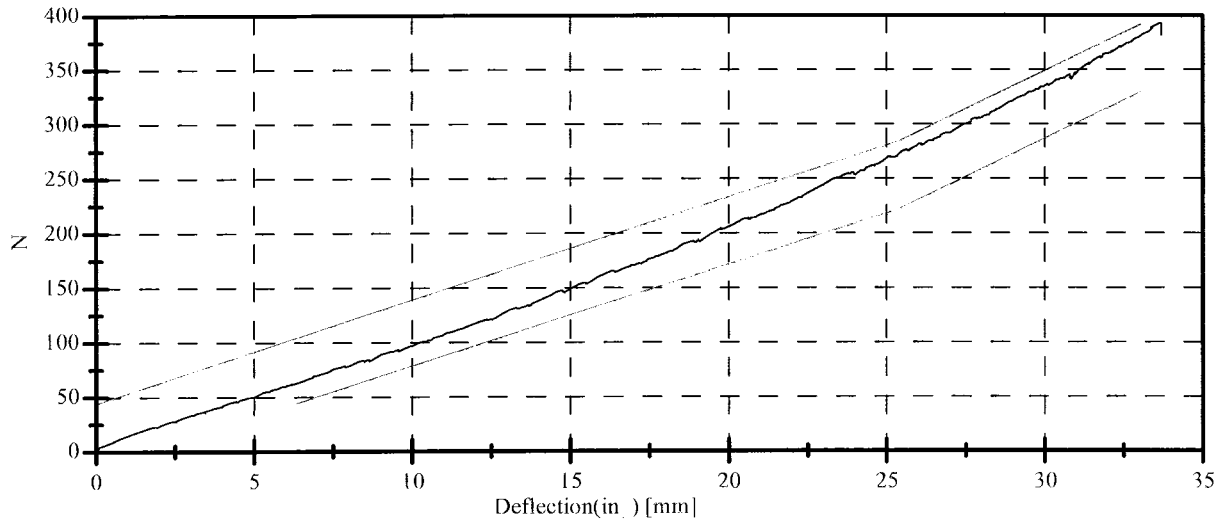
Date: 04-02-07

Sequential Test Number: 1 File: 015AB 04-02-07

Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	35.00 %	Passed
Force at 12.95 mm :	104.00-162.00 N	126.22 N	Passed
Force at 19.05 mm :	162.98-220.99 N	192.91 N	Passed
Force at 25.40 mm :	221.97-280.02 N	272.30 N	Passed
Force at 33.02 mm :	324.99-391.00 N	381.04 N	Passed

ABDOMINAL COMPRESSION TEST



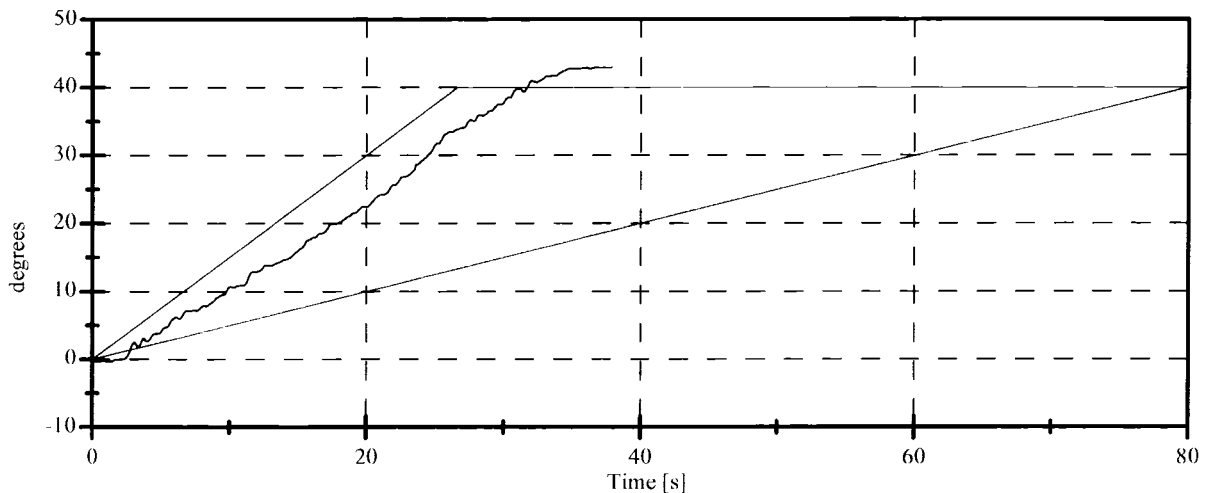
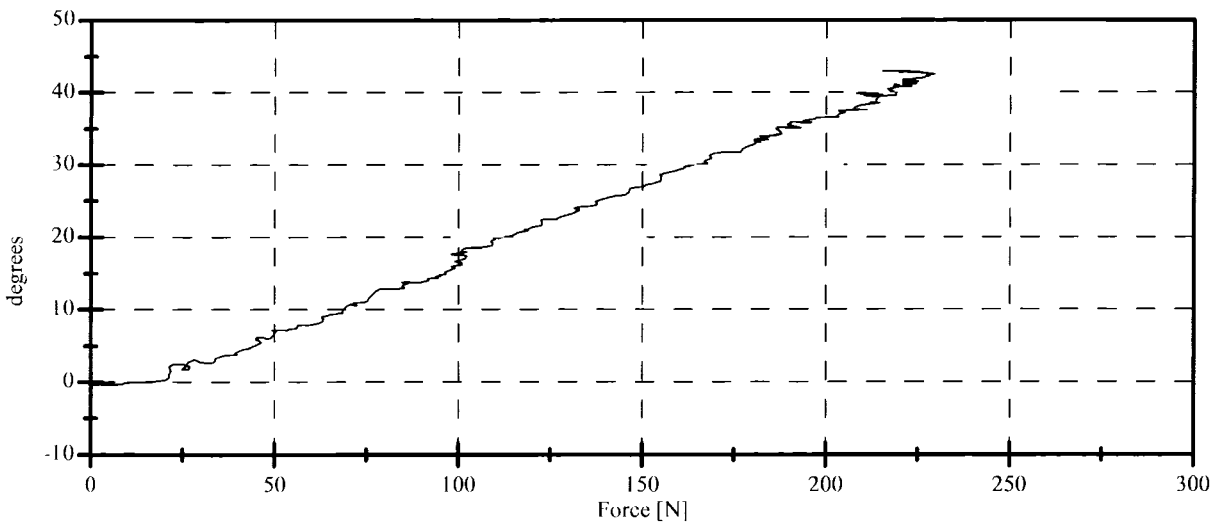
**Lumbar Spine
Pre-Test
CONFIGURED FOR LEFT SIDE IMPACT**

ATD Serial No: 015
Date: 04-02-07

Sequential Test Number: 1 File: 015SP 04-02-07
Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	35.00 %	Passed
Force at 0 Deg:	0.00-26.69 N	10.32 N	Passed
Force at 20 Deg:	97.86-151.24 N	112.43 N	Passed
Force at 30 Deg	151.24-204.62 N	163.62 N	Passed
Force at 40 Deg	204.62-258.00 N	218.98 N	Passed
Return Angle	12 Deg Max	3.95 deg	Passed

LUMBAR SPINE FLEXION TEST



PRE-TEST DUMMY INSPECTION LIST
CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 015 Sequential Test Number: 1
 Date: 4-2-07 Laboratory Technician: B. Swiecicki

PART	ITEMS CHECKED	COMMENTS
SKIN	VISUAL INSPECTION	OK
HEAD	VISUAL, BALLAST, ACCELEROMETER MOUNT	OK
NECK	VISUAL, CABLE TORQUE	OK
SPINE BOX	VISUAL, BALLAST, WELDMENT, ACCELEROMETER MOUNT	OK
RIB CAGE	VISUAL, MEASURE, STIFFENERS	OK
STERNUM	VISUAL	OK
LUMBAR SPINE	VISUAL	OK
ABDOMEN	VISUAL	OK
PELVIS	VISUAL, PALPATE, ACCELEROMETER MOUNT	OK
UPPER LEGS	VISUAL	OK
KNEES	VISUAL, STOPS, INSERTS	OK
LOWER LEGS	VISUAL, RANGE OF MOTION	OK
ANKLES	VISUAL, RANGE OF MOTION	OK
FEET	VISUAL, RANGE OF MOTION	OK
JOINTS	1 TO 2 g RANGE	OK
OTHER	NONE	-

REMARKS: None

CALIBRATION TEST RESULTS

PRE-TEST

SID NO.: 013

CONFIGURED FOR LEFT SIDE IMPACT

**CALIBRATION TEST RESULTS SUMMARY
PRE-TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 013 Sequential Test Number: 1
Date: 4-2-07 Laboratory Technician: B. Swiecicki

TEST	COMMENTS
EXTERNAL DIMENSIONS	Passed all requirements.
THORACIC SHOCK ABSORBER TEST	Passed all requirements.
LATERAL THORAX IMPACT TEST	Passed all requirements.
LATERAL PELVIS IMPACT TEST	Passed all requirements.
HEAD DROP TEST*	Passed all requirements.
ABDOMINAL COMPRESSION TEST*	Passed all requirements.
LUMBAR FLEXION TEST*	Passed all requirements.

* Test not required for SID certification.

REMARKS: None

**EXTERNAL DIMENSIONS
PRE-TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 013 Sequential Test Number: 1
Date: 4-2-07 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
SH- Seated Height (mm)	889 - 909	902
RH- Rib Height (mm)	502 - 520	513
HP- Hip Pivot Height (mm)	99 ref.	99
RD- Rib from Back Line (mm)	229 - 241	239
KH- Knee Pivot from Back Line (mm)	511 - 526	518
KV- Knee Pivot to Floor (mm)	490 - 505	493
HW- Hip Width (mm)	356 - 391	378

REMARKS: None

Shock Low (3.05 m/s)

PRE TEST

CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 013

Date: 03-22-07

Sequential Test Number: 1 File: 013 SL 03-22-07

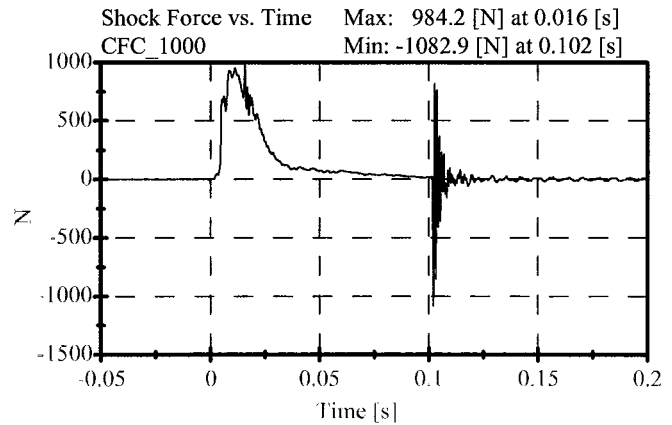
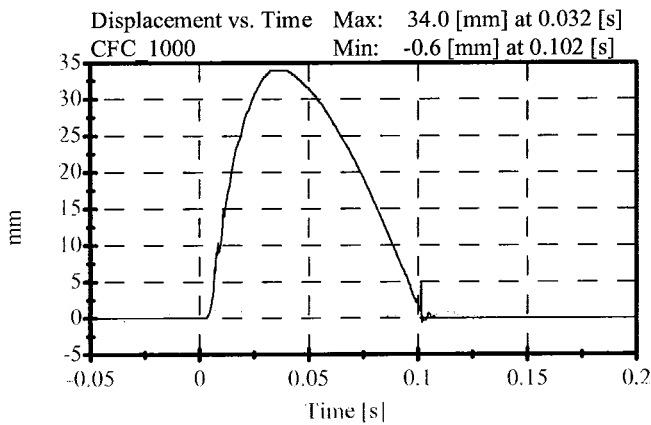
Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	37.00 %	Passed
Displacement:	30.00-35.00 mm	33.98 mm	Passed
Maximum Force:	836.00-1125.00 N	984.18 N	Passed

Impact Test Velocity: 3.05 m/s

Damper Identification: 013

Damper Setting: 5

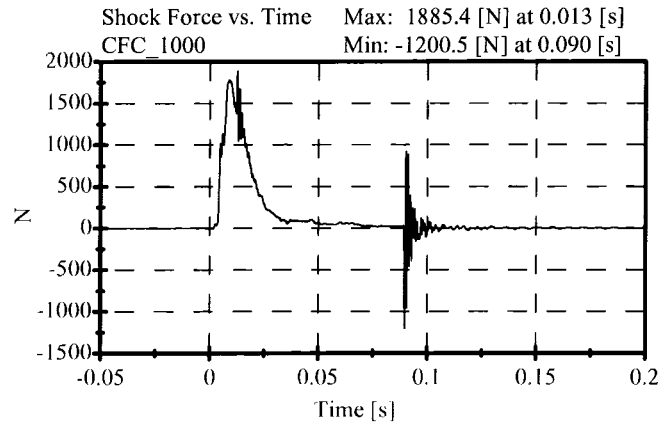
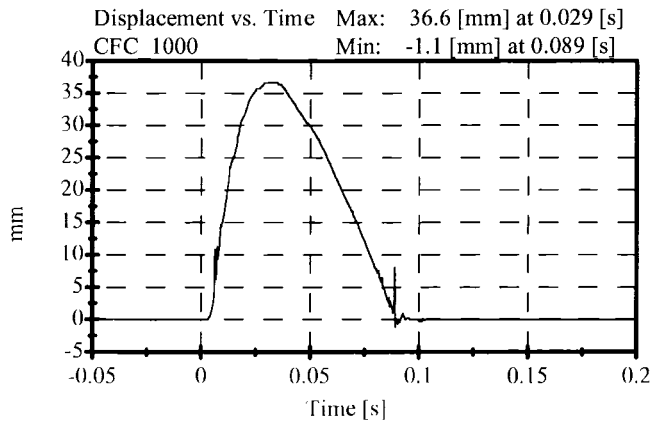


Shock Med (4.27 m/s)
PRE TEST
CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 013
Date: 03-22-07

Sequential Test Number: 1 File: 013 SM 03-22-07
Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	37.00 %	Passed
Displacement:	32.00-37.00 mm	36.64 mm	Passed
Maximum Force:	1730.00-2099.00 N	1885.43 N	Passed
Impact Test Velocity:	4.27 m/s		
Damper Identification:	013		
Damper Setting:	5		



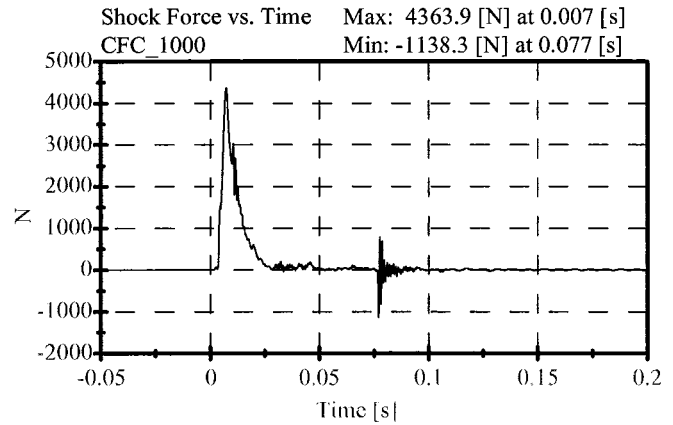
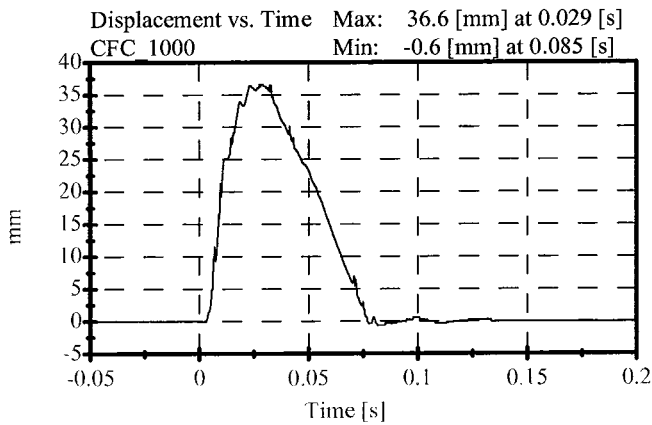
Shock High (6.10 m/s)
PRE TEST
CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 013
Date: 03-22-07

Sequential Test Number: 1 File: 013 SH1 03-22-07
Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	37.00 %	Passed
Displacement:	33.00-40.00 mm	36.63 mm	Passed
Maximum Force:	3741.00-4448.00 N	4363.90 N	Passed

Impact Test Velocity: 6.10 m/s
Damper Identification: 013
Damper Setting: 5

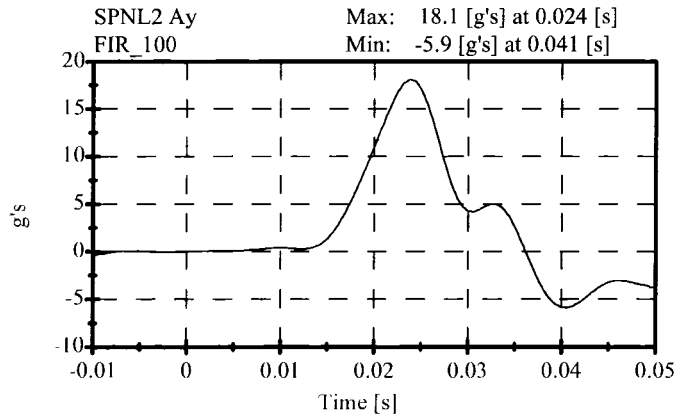
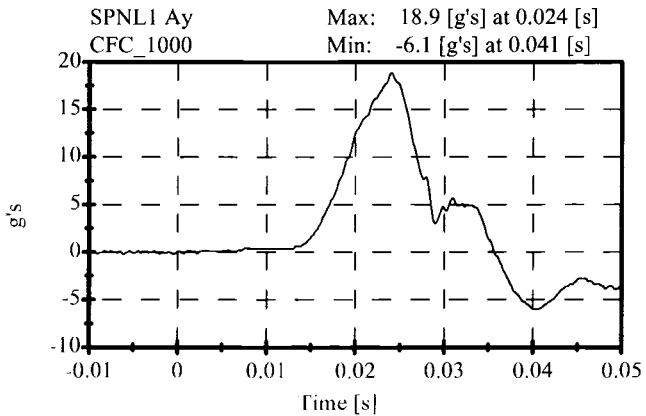
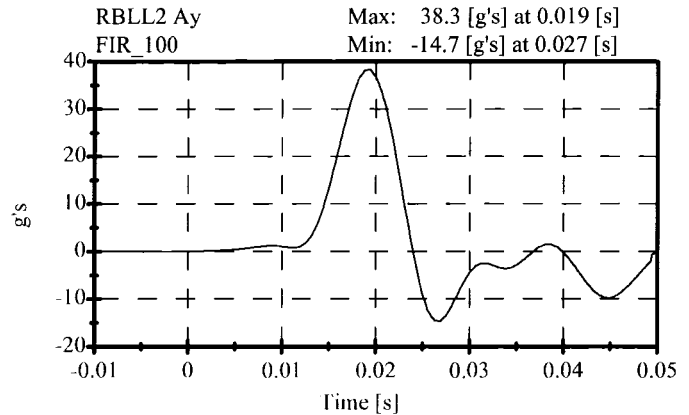
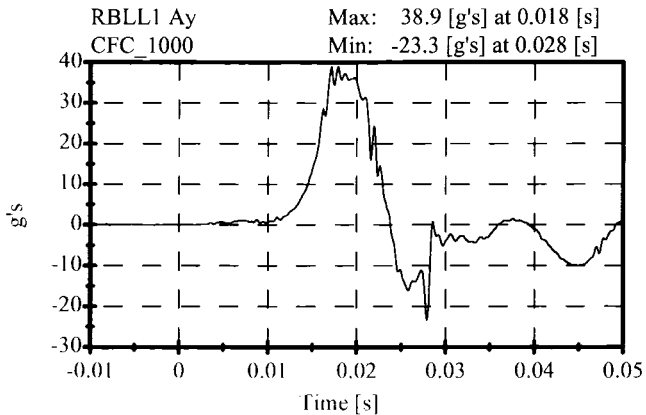
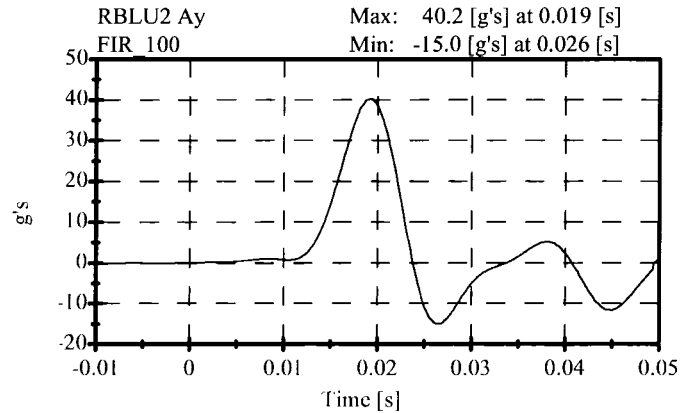
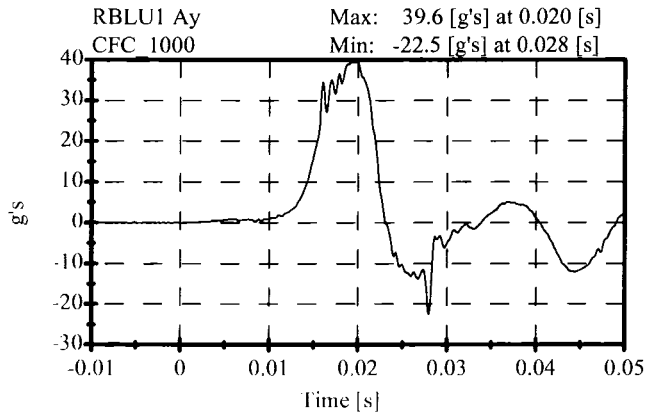


Thorax Impact
Pre-Test
CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 013
Date: 04-02-07

Sequential Test Number: 1 File: 013T 04-02-07
Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	37.00 %	Passed
Probe Velocity:	4.27- 4.33 m/s	4.31 m/s	Passed
Upper Rib Acceleration:	37.00-46.00 g's	40.23 g's	Passed
Lower Rib Acceleration:	37.00-46.00 g's	38.31 g's	Passed
Lower Spine Acceleration:	15.00-22.00 g's	18.10 g's	Passed



Pelvic Impact

Pre-Test

CONFIGURED FOR LEFT SIDE IMPACT

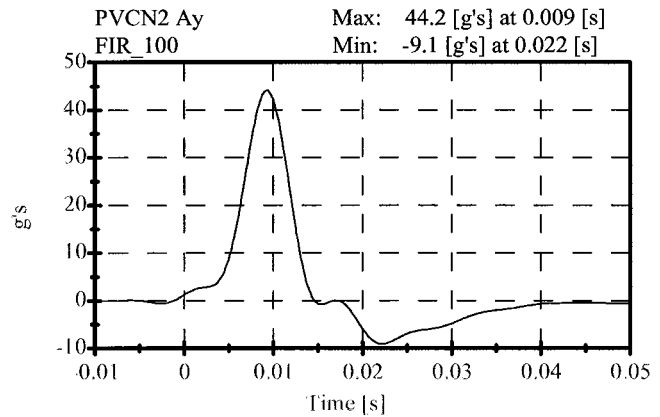
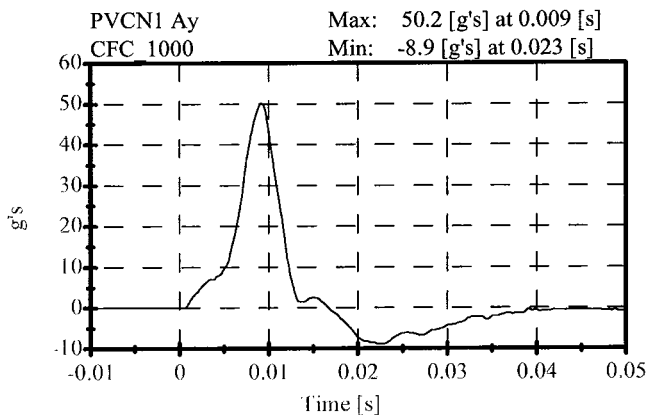
ATD Serial No: 013

Date: 04-02-07

Sequential Test Number: 1 File: 013P 04-02-07

Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	37.00 %	Passed
Probe Velocity:	4.27- 4.33 m/s	4.29 m/s	Passed
Pelvis Y Acceleration:	40.00-60.00 g's	44.21 g's	Passed
Time Above 20 Gs	3.0-7.0 ms	5.8 ms	Passed



Head Drop

Pre-Test

CONFIGURED FOR LEFT SIDE IMPACT

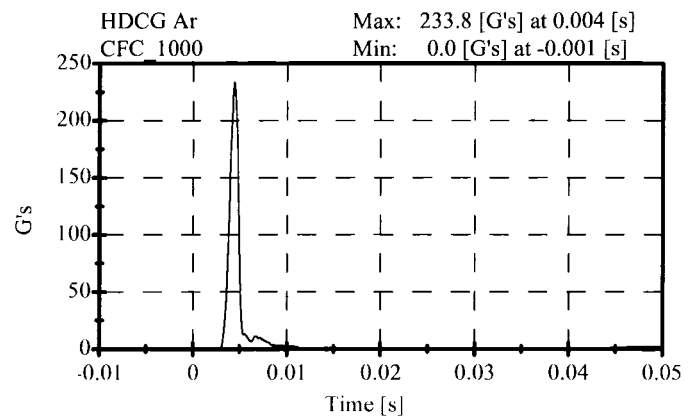
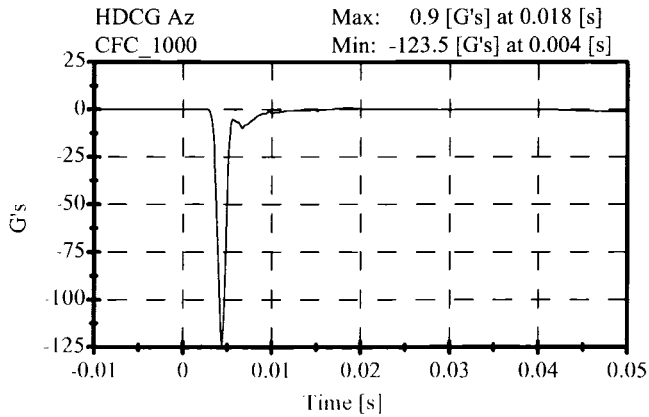
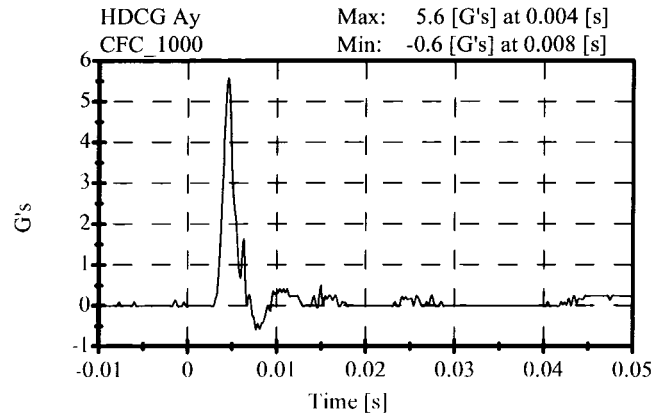
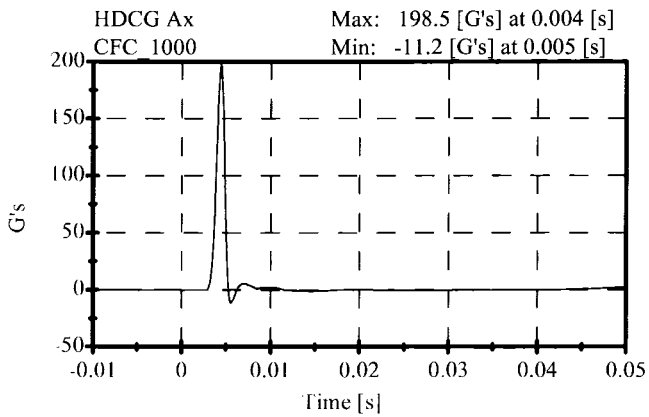
ATD Serial No: 013

Date: 04-02-07

Sequential Test Number: 1 File: 013HD 04-02-07

Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.6 C	21.1 C	Passed
Lab Humidity:	10-70 %	35.00 %	Passed
Peak Resultant Accel.:	210-260 Gs	233.81 Gs	Passed
Peak Lateral Accel.:	10 Gs Max	5.57 Gs	Passed
Unimodal Criteria Above 100 Gs:	0.9-1.5 ms	1.15 ms	Passed
Curve PerCent NonModal:	< 10%	5.56 %	Passed



Abdomen Test

Pre-Test

CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 013

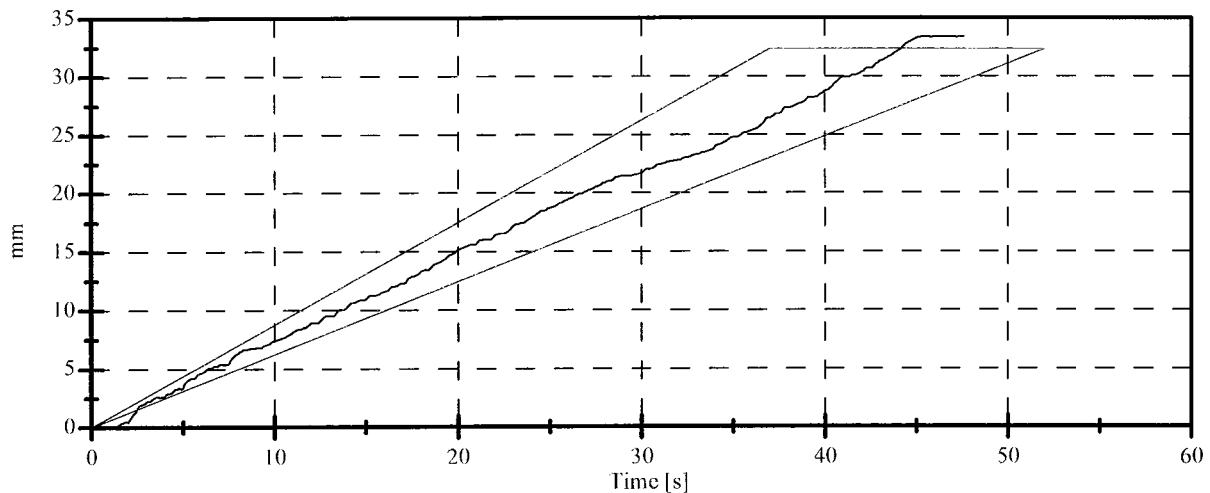
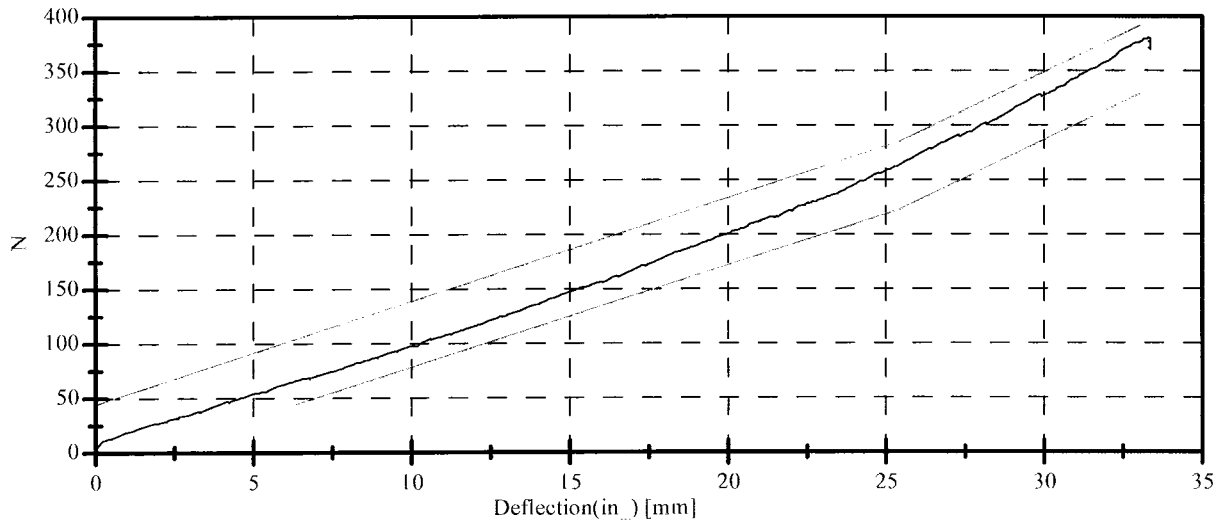
Date: 04-02-07

Sequential Test Number: 1 File: 013AB 04-02-07

Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	35.00 %	Passed
Force at 12.95 mm :	104.00-162.00 N	125.13 N	Passed
Force at 19.05 mm :	162.98-220.99 N	190.74 N	Passed
Force at 25.40 mm :	221.97-280.02 N	262.51 N	Passed
Force at 33.02 mm :	324.99-391.00 N	375.60 N	Passed

ABDOMINAL COMPRESSION TEST



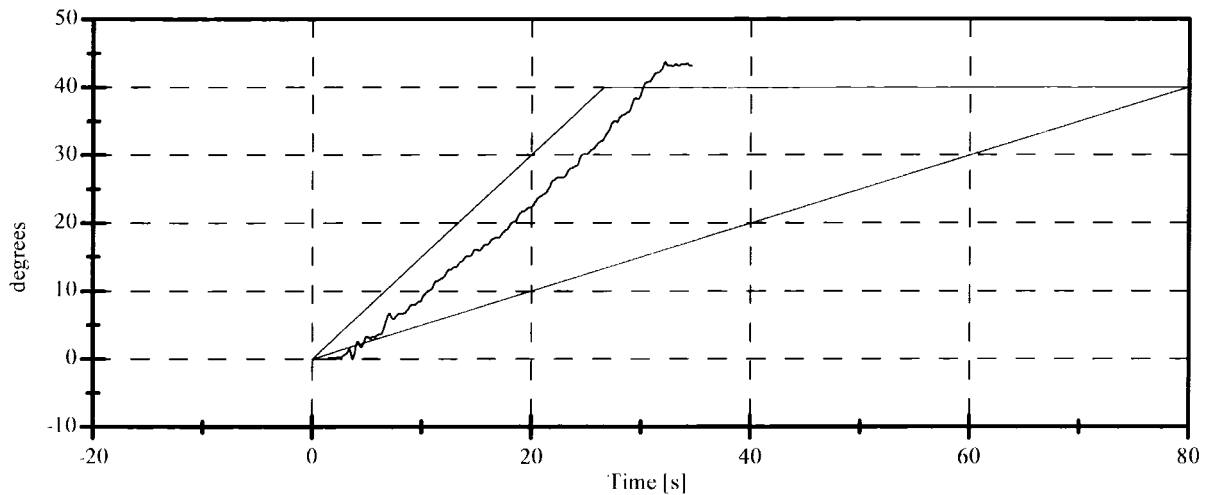
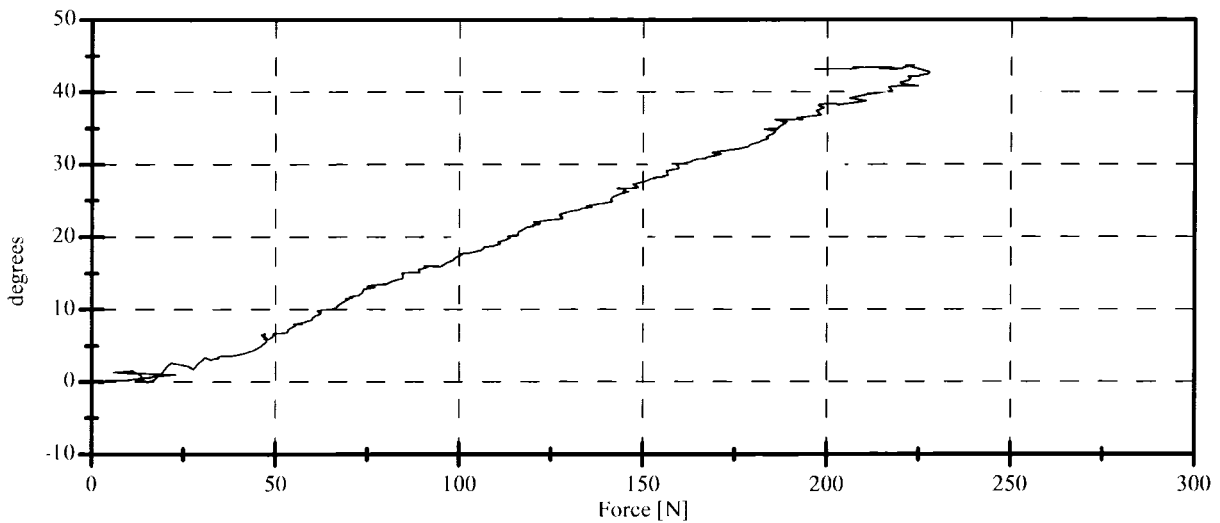
**Lumbar Spine
Pre-Test
CONFIGURED FOR LEFT SIDE IMPACT**

ATD Serial No: 013
Date: 04-02-07

Sequential Test Number: 1 File: 013SP 04-02-07
Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	35.00 %	Passed
Force at 0 Deg:	0.00-26.69 N	0.66 N	Passed
Force at 20 Deg:	97.86-151.24 N	112.95 N	Passed
Force at 30 Deg	151.24-204.62 N	158.39 N	Passed
Force at 40 Deg	204.62-258.00 N	217.68 N	Passed
Return Angle	12 Deg Max	2.13 deg	Passed

LUMBAR SPINE FLEXION TEST



PRE-TEST DUMMY INSPECTION LIST
CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 013 Sequential Test Number: 1
 Date: 4-2-07 Laboratory Technician: B. Swiecicki

PART	ITEMS CHECKED	COMMENTS
SKIN	VISUAL INSPECTION	OK
HEAD	VISUAL, BALLAST, ACCELEROMETER MOUNT	OK
NECK	VISUAL, CABLE TORQUE	OK
SPINE BOX	VISUAL, BALLAST, WELDMENT, ACCELEROMETER MOUNT	OK
RIB CAGE	VISUAL, MEASURE, STIFFENERS	OK
STERNUM	VISUAL	OK
LUMBAR SPINE	VISUAL	OK
ABDOMEN	VISUAL	OK
PELVIS	VISUAL, PALPATE, ACCELEROMETER MOUNT	OK
UPPER LEGS	VISUAL	OK
KNEES	VISUAL, STOPS, INSERTS	OK
LOWER LEGS	VISUAL, RANGE OF MOTION	OK
ANKLES	VISUAL, RANGE OF MOTION	OK
FEET	VISUAL, RANGE OF MOTION	OK
JOINTS	1 TO 2 g RANGE	OK
OTHER	NONE	-

REMARKS: None

CALIBRATION TEST RESULTS

POST TEST

SID NO.: 015

CONFIGURED FOR LEFT SIDE IMPACT

**CALIBRATION TEST RESULTS SUMMARY
POST TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 015 Sequential Test Number: 1
Date: 4-16-07 Laboratory Technician: B. Swiecicki

TEST	COMMENTS
EXTERNAL DIMENSIONS	Passed all requirements.
LATERAL THORAX IMPACT TEST	Passed all requirements.
LATERAL PELVIS IMPACT TEST	Passed all requirements.
HEAD DROP TEST*	Passed all requirements.
ABDOMINAL COMPRESSION TEST*	Passed all requirements.
LUMBAR FLEXION TEST*	Passed all requirements.

* Test not required for SID certification.

REMARKS: None

**EXTERNAL DIMENSIONS
POST TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 015 Sequential Test Number: 1
Date: 4-16-07 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
SH- Seated Height (mm)	889 - 909	902
RH- Rib Height (mm)	502 - 520	511
HP- Hip Pivot Height (mm)	99 ref.	99
RD- Rib from Back Line (mm)	229 - 241	239
KH- Knee Pivot from Back Line (mm)	511 - 526	518
KV- Knee Pivot to Floor (mm)	490 - 505	493
HW- Hip Width (mm)	356 - 391	376

REMARKS: None

Thorax Impact

Post-Test

CONFIGURED FOR LEFT SIDE IMPACT

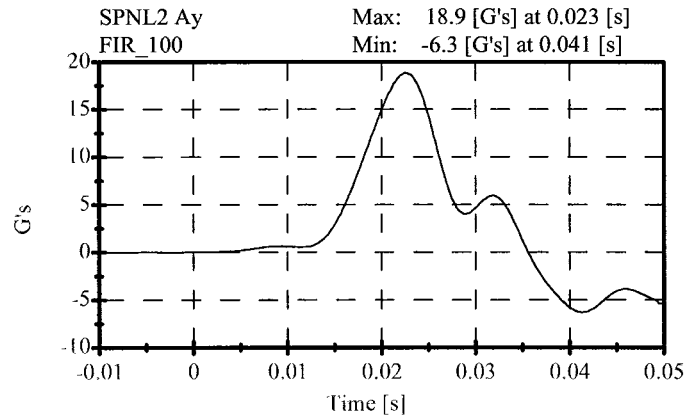
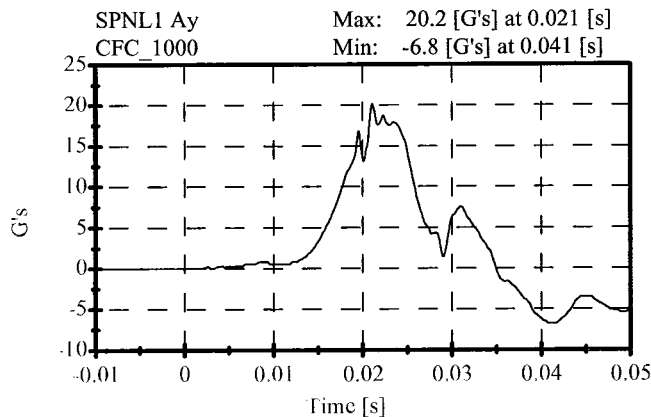
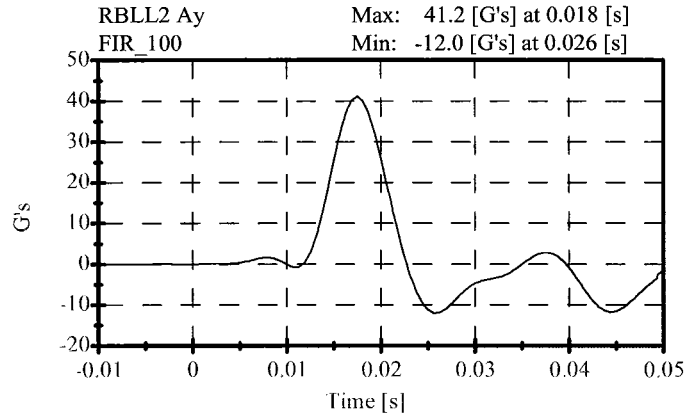
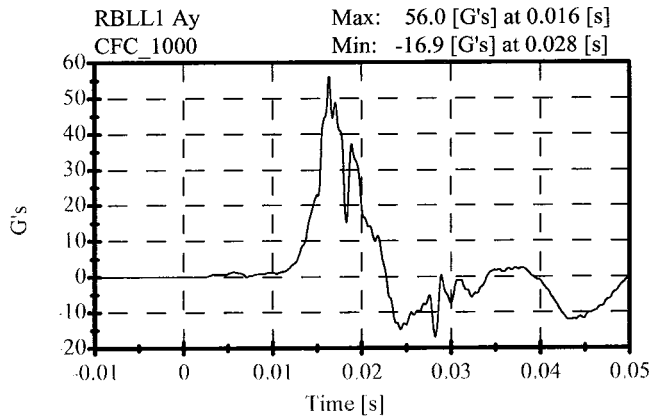
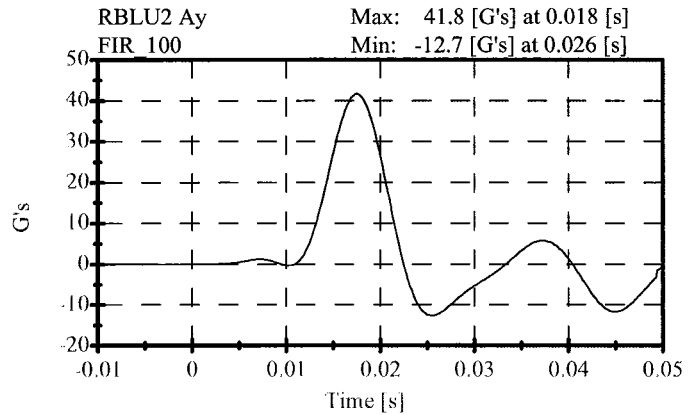
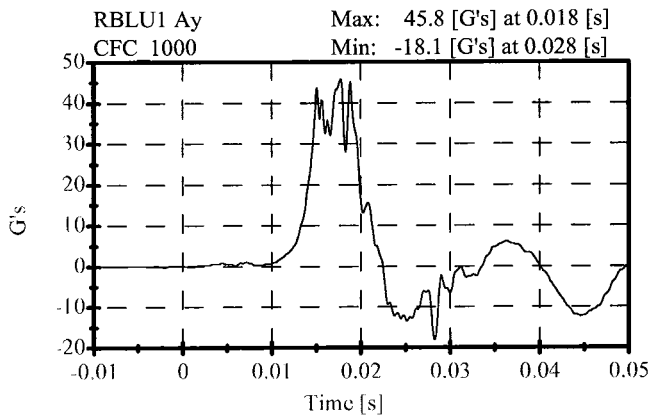
ATD Serial No: 015

Date: 04-16-07

Sequential Test Number: 1 File: 015T 04-16-07

Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	35.00 %	Passed
Probe Velocity:	4.27- 4.33 m/s	4.32 m/s	Passed
Upper Rib Acceleration:	37.00-46.00 G's	41.78 G's	Passed
Lower Rib Acceleration:	37.00-46.00 G's	41.15 G's	Passed
Lower Spine Acceleration:	15.00-22.00 G's	18.87 G's	Passed



Pelvic Impact

Post-Test

CONFIGURED FOR LEFT SIDE IMPACT

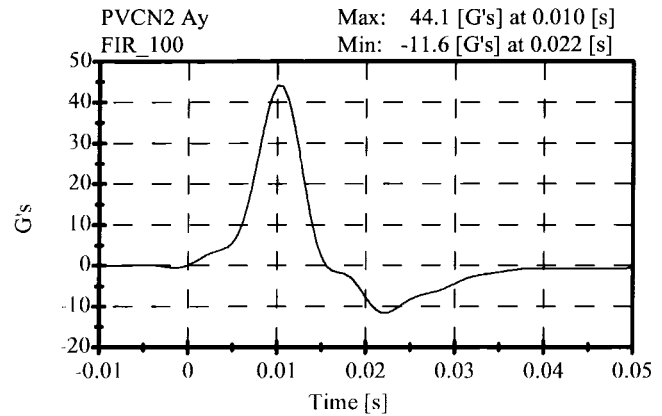
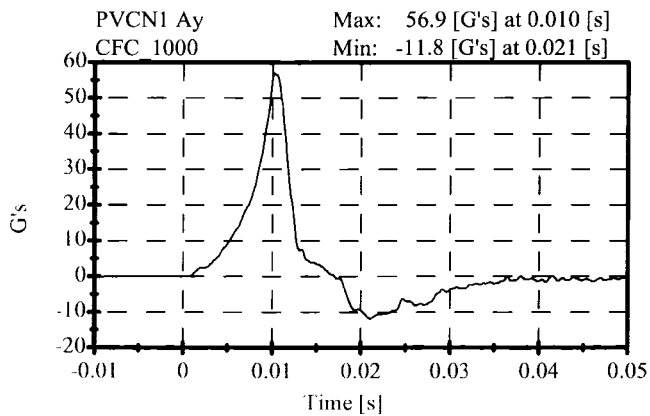
ATD Serial No: 015

Date: 04-16-07

Sequential Test Number: 1 File: 015p 04-16-07

Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	35.00 %	Passed
Probe Velocity:	4.27- 4.33 m/s	4.29 m/s	Passed
Pelvis Y Acceleration:	40.00-60.00 G's	44.11 G's	Passed
Time Above 20 Gs	3.0-7.0 ms	5.9 ms	Passed



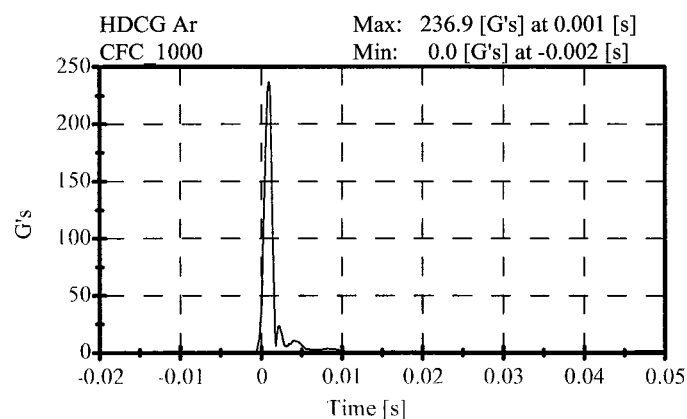
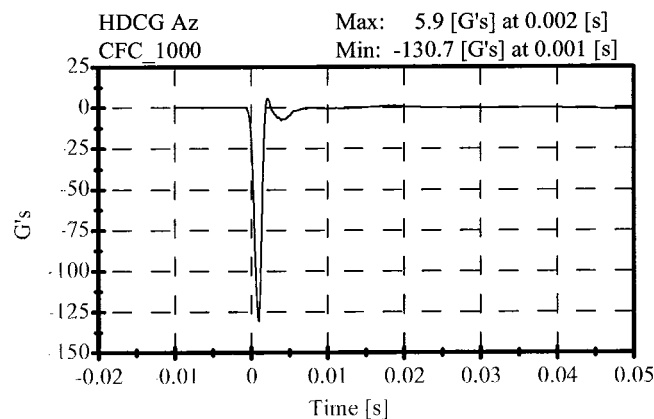
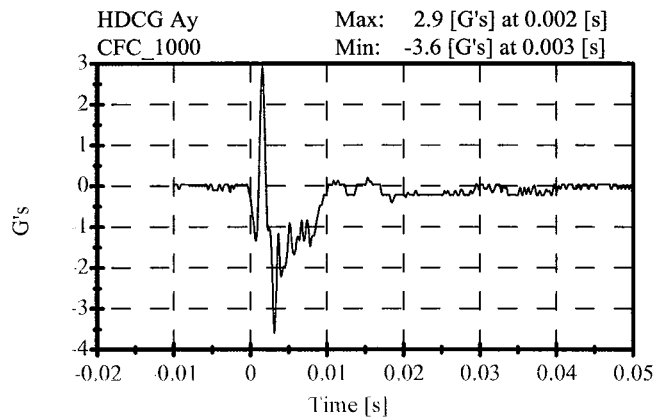
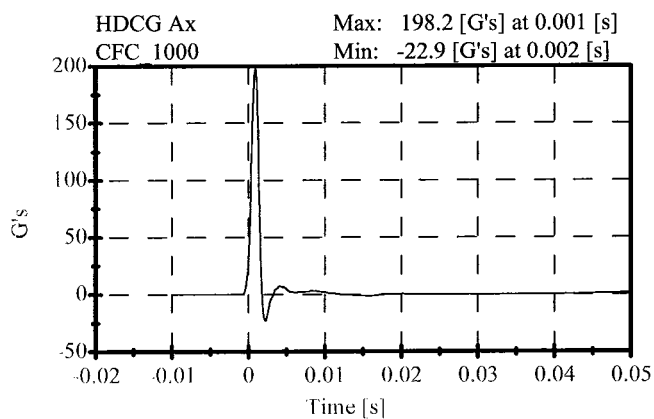
Head Drop **Post-Test**

CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 015
Date: 04-12-07

Sequential Test Number: 1 File: 015HD 04-12-07
Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.6 C	21.1 C	Passed
Lab Humidity:	10-70 %	31.00 %	Passed
Peak Resultant Accel.:	210-260 Gs	236.91 Gs	Passed
Peak Lateral Accel.:	10 Gs Max	3.59 Gs	Passed
Unimodal Criteria Above 100 Gs:	0.9-1.5 ms	1.16 ms	Passed
Curve PerCent NonModal:	< 10%	9.96 %	Passed



Abdomen Test

Post-Test

CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 015

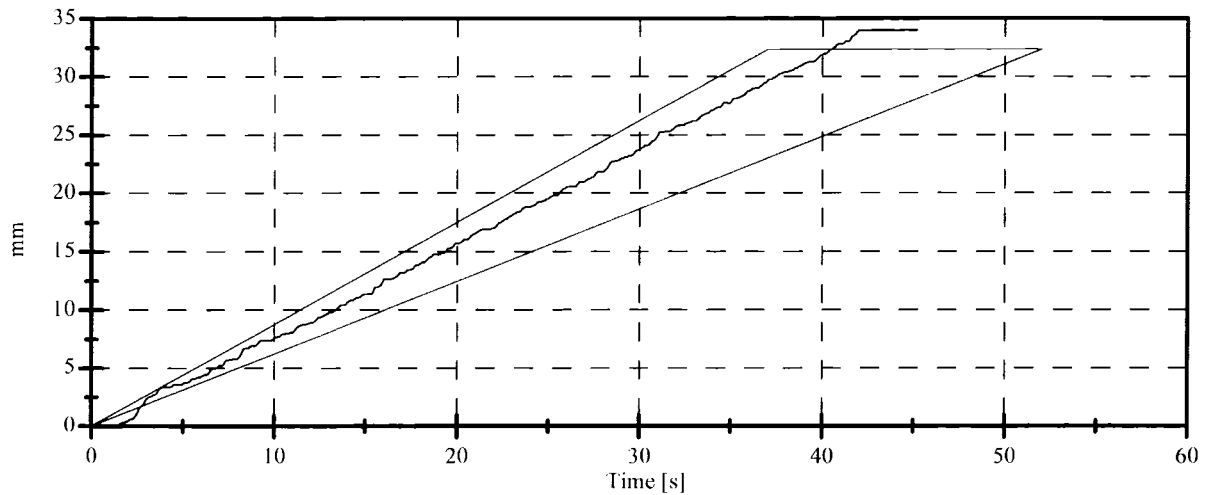
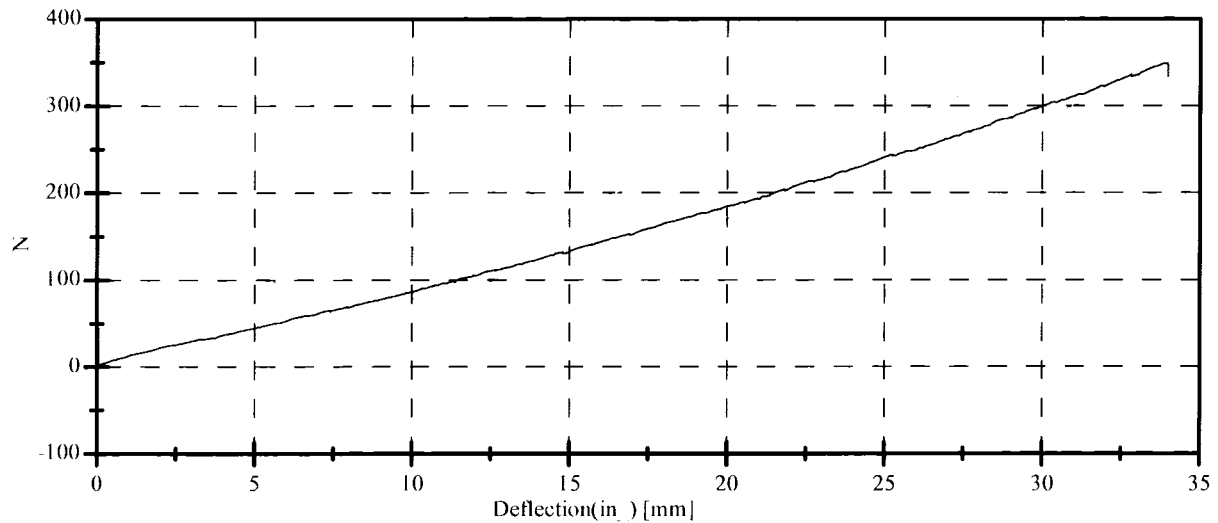
Date: 04-17-07

Sequential Test Number: 1 File: 015ab 04-17-07

Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	29.00 %	Passed
Force at 12.95 mm :	104.00-162.00 N	114.62 N	Passed
Force at 19.05 mm :	162.98-220.99 N	175.51 N	Passed
Force at 25.40 mm :	221.97-280.02 N	244.39 N	Passed
Force at 33.02 mm :	324.99-391.00 N	335.73 N	Passed

ABDOMINAL COMPRESSION TEST



Lumbar Spine

Post-Test

CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 015

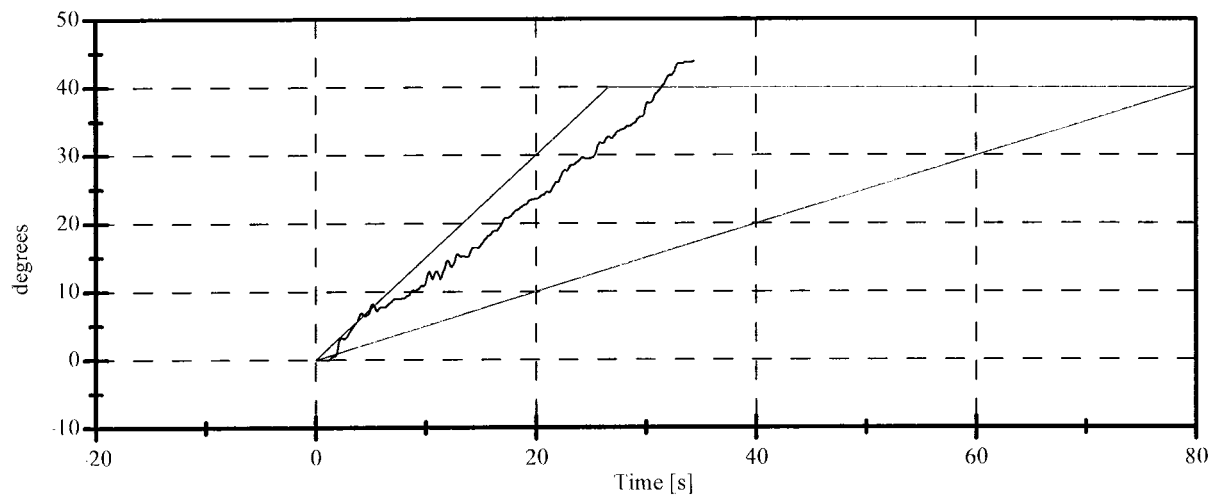
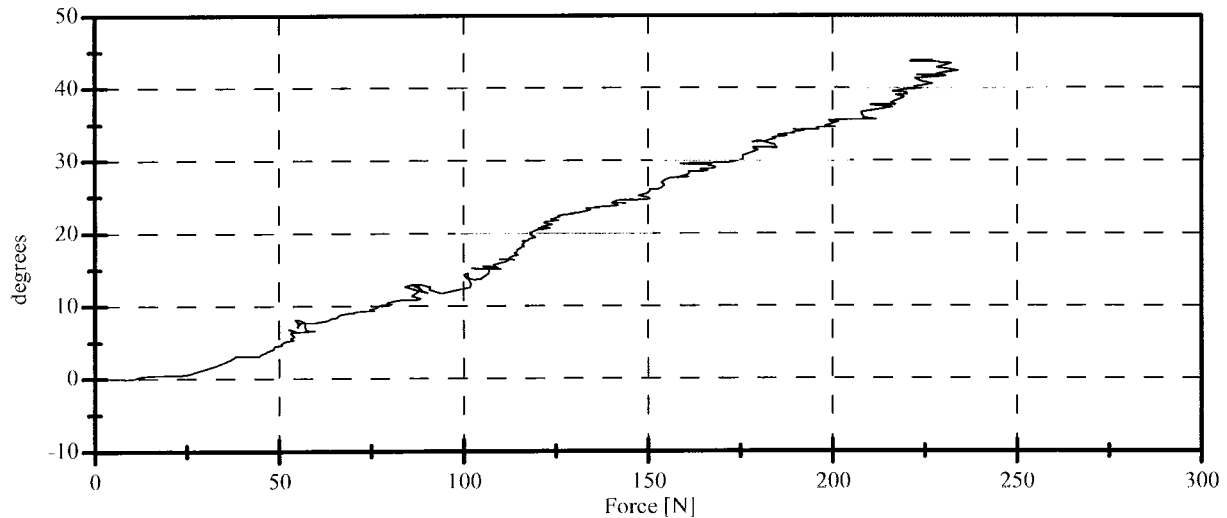
Date: 04-17-06

Sequential Test Number: 1 File: 015sp 04-17-07

Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	29.00 %	Passed
Force at 0 Deg:	0.00-26.69 N	1.18 N	Passed
Force at 20 Deg:	97.86-151.24 N	117.92 N	Passed
Force at 30 Deg:	151.24-204.62 N	174.06 N	Passed
Force at 40 Deg:	204.62-258.00 N	223.94 N	Passed
Return Angle	12 Deg Max	5.02 deg	Passed

LUMBAR SPINE FLEXION TEST



POST TEST DUMMY INSPECTION LIST
CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 015 Sequential Test Number: 1
 Date: 4-16-07 Laboratory Technician: B. Swiecicki

PART	ITEMS CHECKED	COMMENTS
SKIN	VISUAL INSPECTION	OK
HEAD	VISUAL, BALLAST, ACCELEROMETER MOUNT	OK
NECK	VISUAL, CABLE TORQUE	OK
SPINE BOX	VISUAL, BALLAST, WELDMENT, ACCELEROMETER MOUNT	OK
RIB CAGE	VISUAL, MEASURE, STIFFENERS	OK
STERNUM	VISUAL	OK
LUMBAR SPINE	VISUAL	OK
ABDOMEN	VISUAL	OK
PELVIS	VISUAL, PALPATE, ACCELEROMETER MOUNT	OK
UPPER LEGS	VISUAL	OK
KNEES	VISUAL, STOPS, INSERTS	OK
LOWER LEGS	VISUAL, RANGE OF MOTION	OK
ANKLES	VISUAL, RANGE OF MOTION	OK
FEET	VISUAL, RANGE OF MOTION	OK
JOINTS	1 TO 2 g RANGE	OK
OTHER	NONE	-

REMARKS: None

CALIBRATION TEST RESULTS

POST TEST

SID NO.: 013

CONFIGURED FOR LEFT SIDE IMPACT

**CALIBRATION TEST RESULTS SUMMARY
POST TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 013 Sequential Test Number: 1
Date: 4-16-07 Laboratory Technician: B. Swiecicki

TEST	COMMENTS
EXTERNAL DIMENSIONS	Passed all requirements.
LATERAL THORAX IMPACT TEST	Passed all requirements.
LATERAL PELVIS IMPACT TEST	Passed all requirements.
HEAD DROP TEST*	Passed all requirements.
ABDOMINAL COMPRESSION TEST*	Passed all requirements.
LUMBAR FLEXION TEST*	Passed all requirements.

* Test not required for SID certification.

REMARKS: None

**EXTERNAL DIMENSIONS
POST TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 013 Sequential Test Number: 1
Date: 4-16-07 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
SH- Seated Height (mm)	889 - 909	902
RH- Rib Height (mm)	502 - 520	513
HP- Hip Pivot Height (mm)	99 ref.	99
RD- Rib from Back Line (mm)	229 - 241	239
KH- Knee Pivot from Back Line (mm)	511 - 526	518
KV- Knee Pivot to Floor (mm)	490 - 505	493
HW- Hip Width (mm)	356 - 391	379

REMARKS: None

Thorax Impact

Post-Test

CONFIGURED FOR LEFT SIDE IMPACT

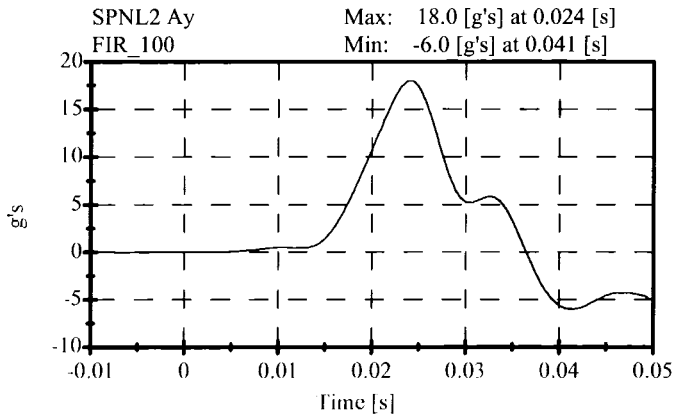
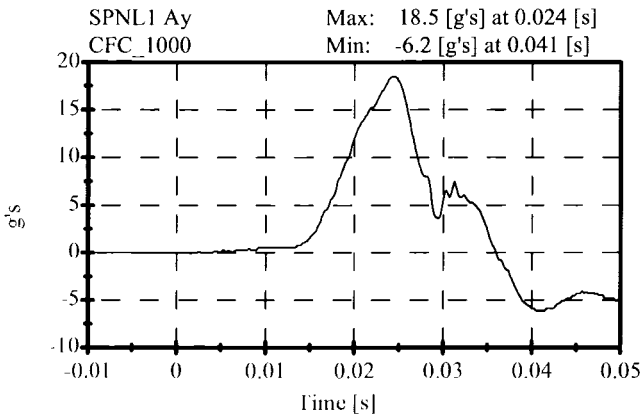
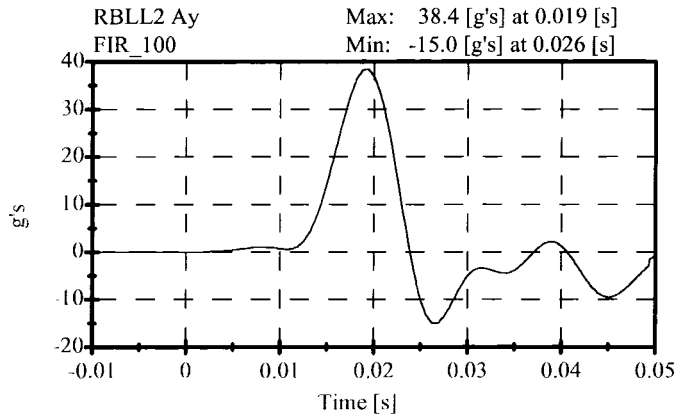
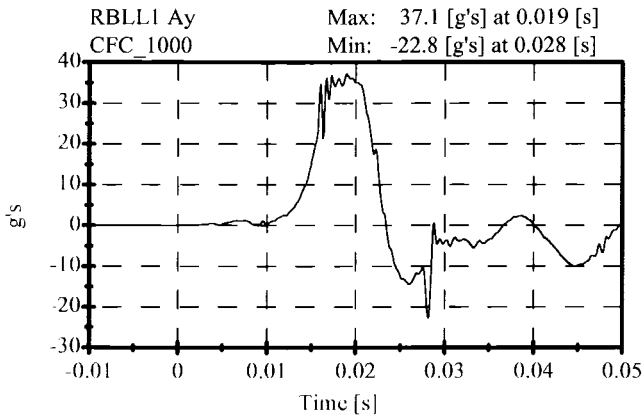
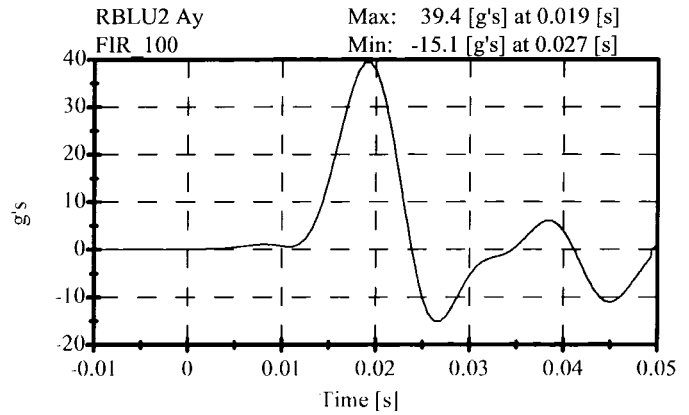
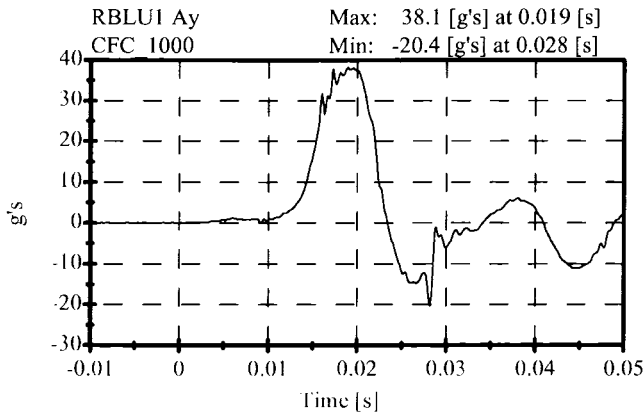
ATD Serial No: 013

Date: 04-16-07

Sequential Test Number: 1 File: 013T 04-16-07

Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	35.00 %	Passed
Probe Velocity:	4.27- 4.33 m/s	4.33 m/s	Passed
Upper Rib Acceleration:	37.00-46.00 g's	39.44 g's	Passed
Lower Rib Acceleration:	37.00-46.00 g's	38.42 g's	Passed
Lower Spine Acceleration:	15.00-22.00 g's	17.98 g's	Passed



Pelvic Impact

Post-Test

CONFIGURED FOR LEFT SIDE IMPACT

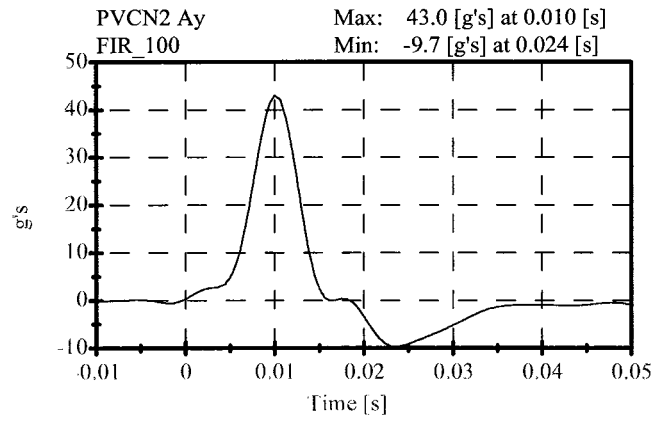
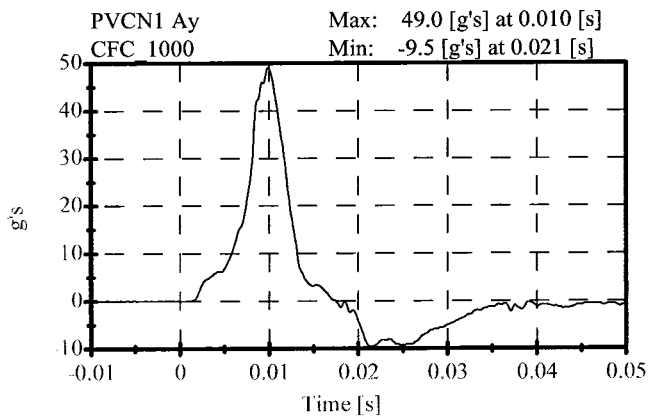
ATD Serial No: 013

Date: 04-16-07

Sequential Test Number: 1 File: 013P 04-16-07

Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	35.00 %	Passed
Probe Velocity:	4.27- 4.33 m/s	4.31 m/s	Passed
Pelvis Y Acceleration:	40.00-60.00 g's	43.02 g's	Passed
Time Above 20 Gs	3.0-7.0 ms	5.8 ms	Passed



Head Drop

Post-Test

CONFIGURED FOR LEFT SIDE IMPACT

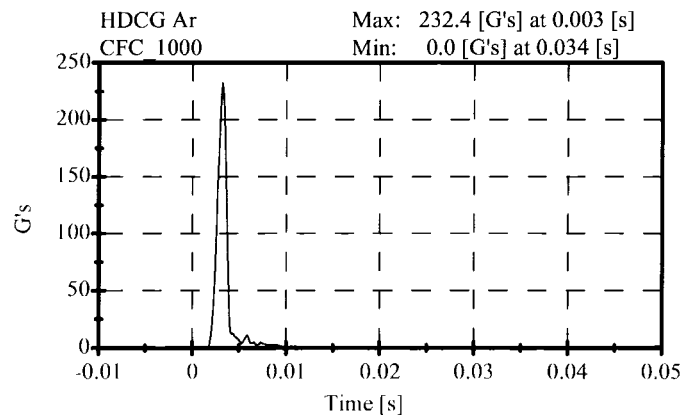
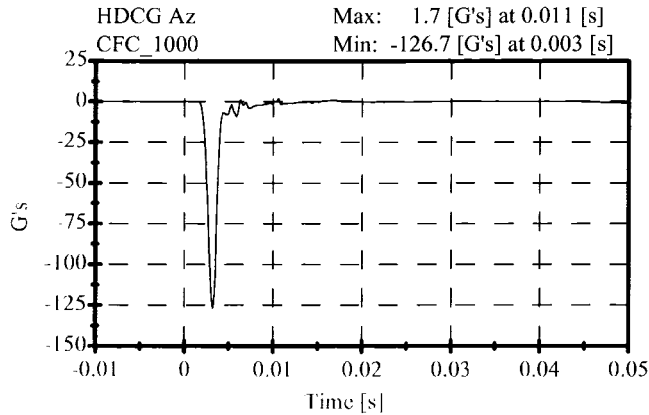
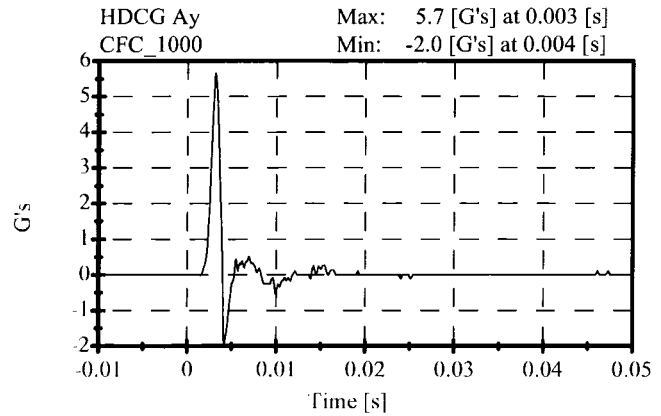
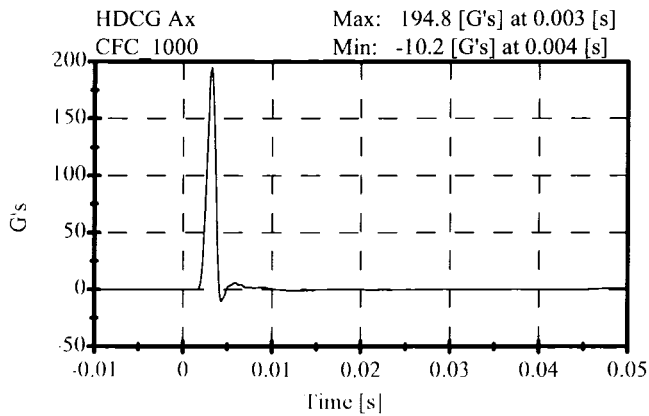
ATD Serial No: 013

Date: 04-12-07

Sequential Test Number: 1 File: 013HD 04-12-07

Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.6 C	21.1 C	Passed
Lab Humidity:	10-70 %	31.00 %	Passed
Peak Resultant Accel.:	210-260 Gs	232.44 Gs	Passed
Peak Lateral Accel.:	10 Gs Max	5.66 Gs	Passed
Unimodal Criteria Above 100 Gs:	0.9-1.5 ms	1.16 ms	Passed
Curve PerCent NonModal:	< 10%	5.44 %	Passed



Abdomen Test

Post-Test

CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 013

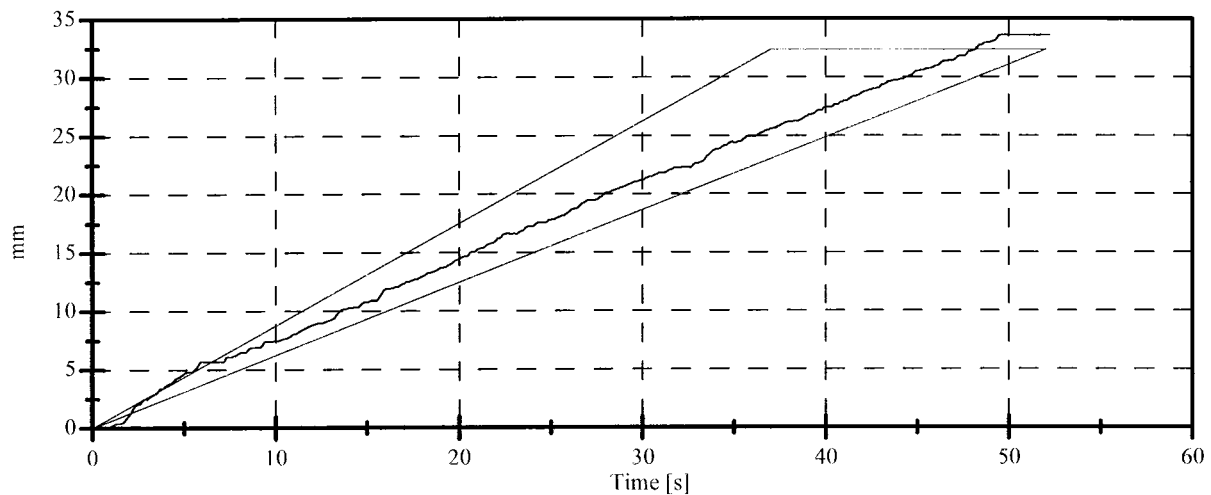
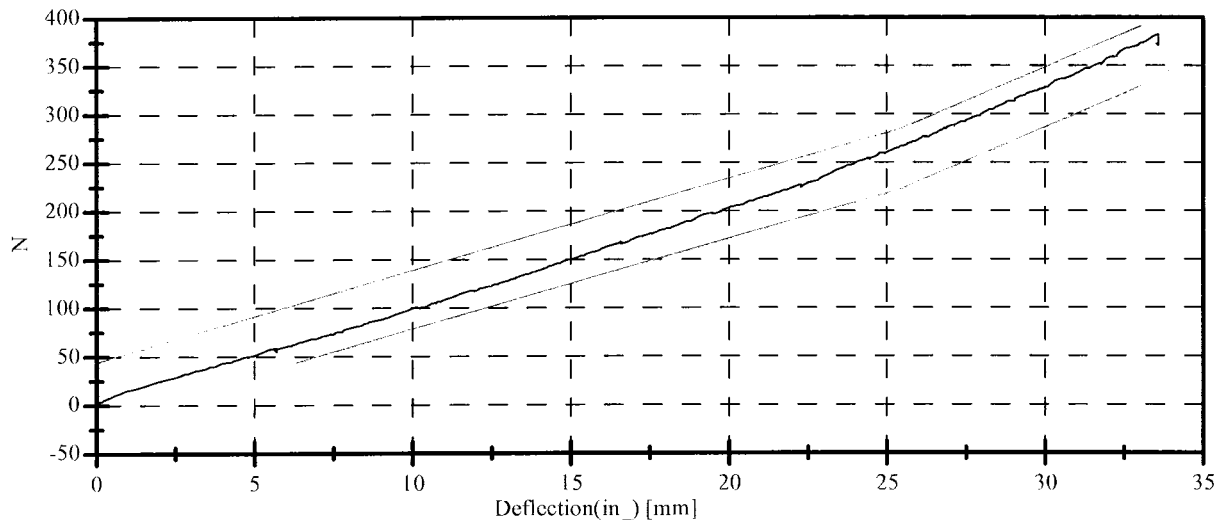
Date: 04-17-07

Sequential Test Number: 1 File: 013ab 04-17-07

Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	29.00 %	Passed
Force at 12.95 mm :	104.00-162.00 N	127.67 N	Passed
Force at 19.05 mm :	162.98-220.99 N	193.64 N	Passed
Force at 25.40 mm :	221.97-280.02 N	265.05 N	Passed
Force at 33.02 mm :	324.99-391.00 N	373.43 N	Passed

ABDOMINAL COMPRESSION TEST



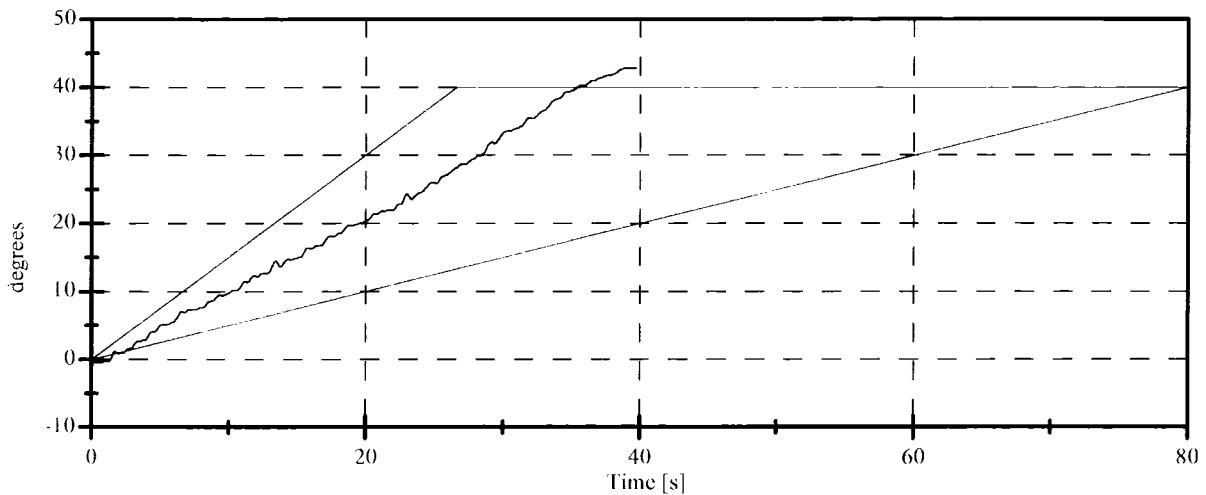
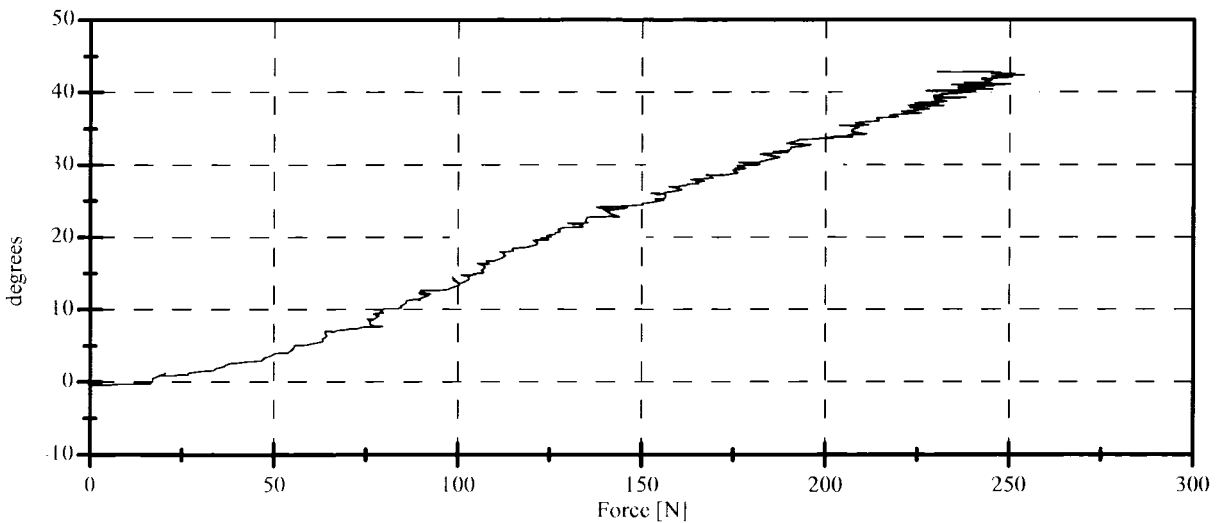
**Lumbar Spine
Post-Test
CONFIGURED FOR LEFT SIDE IMPACT**

ATD Serial No: 013
Date: 04-17-07

Sequential Test Number: 1 File: 013sp 04-17-07
Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	29.00 %	Passed
Force at 0 Deg:	0.00-26.69 N	16.85 N	Passed
Force at 20 Deg:	97.86-151.24 N	124.97 N	Passed
Force at 30 Deg	151.24-204.62 N	178.24 N	Passed
Force at 40 Deg	204.62-258.00 N	240.14 N	Passed
Return Angle	12 Deg Max	3.02 deg	Passed

LUMBAR SPINE FLEXION TEST



POST TEST DUMMY INSPECTION LIST
CONFIGURED FOR LEFT SIDE IMPACT

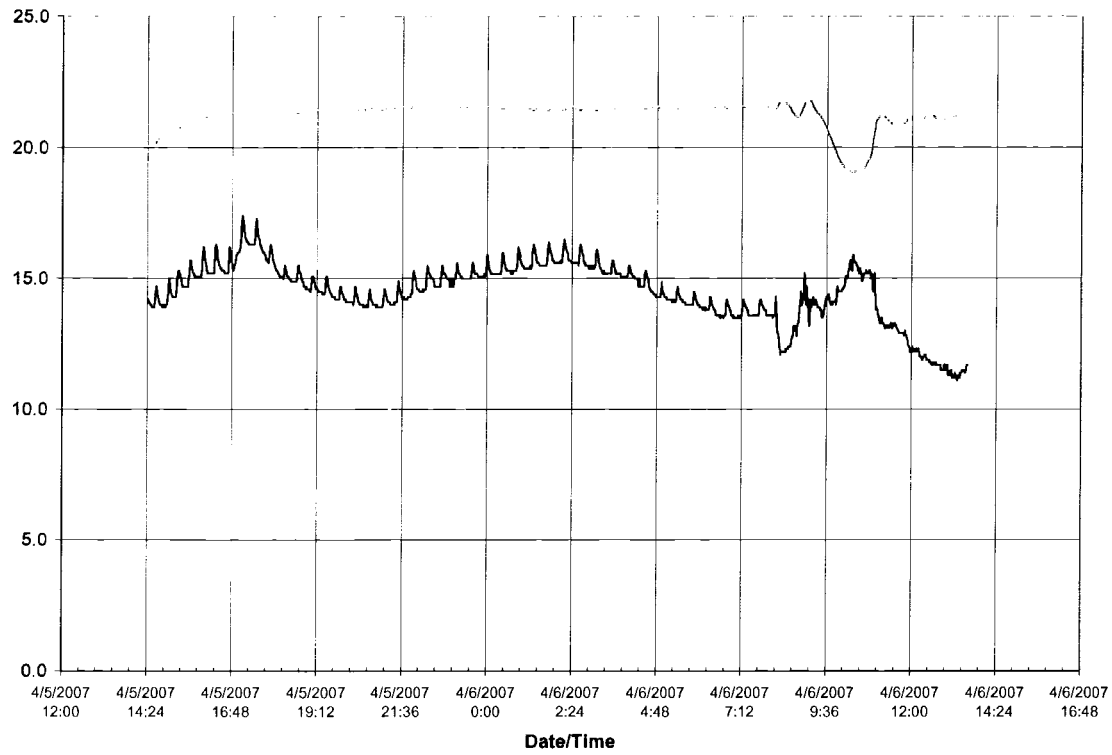
SID Serial No.: 013 Sequential Test Number: 1
 Date: 4-16-07 Laboratory Technician: B. Swiecicki

PART	ITEMS CHECKED	COMMENTS
SKIN	VISUAL INSPECTION	OK
HEAD	VISUAL, BALLAST, ACCELEROMETER MOUNT	OK
NECK	VISUAL, CABLE TORQUE	OK
SPINE BOX	VISUAL, BALLAST, WELDMENT, ACCELEROMETER MOUNT	OK
RIB CAGE	VISUAL, MEASURE, STIFFENERS	OK
STERNUM	VISUAL	OK
LUMBAR SPINE	VISUAL	OK
ABDOMEN	VISUAL	OK
PELVIS	VISUAL, PALPATE, ACCELEROMETER MOUNT	OK
UPPER LEGS	VISUAL	OK
KNEES	VISUAL, STOPS, INSERTS	OK
LOWER LEGS	VISUAL, RANGE OF MOTION	OK
ANKLES	VISUAL, RANGE OF MOTION	OK
FEET	VISUAL, RANGE OF MOTION	OK
JOINTS	1 TO 2 g RANGE	OK
OTHER	NONE	-

REMARKS: None

TEMPERATURE TRACE

2007 Buick LaCrosse C70105 Environmental Conditions



APPENDIX D

TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

SID INSTRUMENTATION

	FRONT SID NO.: 015		
	SERIAL NUMBER	MANUFACTURER	CALIBRATION DATE
HEAD AX	AC-P17283	ENDEVCO	29-Jan-07
HEAD AY	AC-P17285	ENDEVCO	29-Jan-07
HEAD AZ	AC-P14393	ENDEVCO	29-Jan-07
UPPER RIB	AC-P32289	ENDEVCO	19-Feb-07
LOWER RIB	AC-P32217	ENDEVCO	19-Feb-07
LOWER SPINE	AC-P32146	ENDEVCO	19-Feb-07
PELVIS	AC-P18533	ENDEVCO	19-Feb-07
UPPER RIB REDUNDANT	AC-P32276	ENDEVCO	19-Feb-07
LOWER RIB REDUNDANT	AC-P32453	ENDEVCO	19-Feb-07
LOWER SPINE REDUNDANT	AC-P32225	ENDEVCO	19-Feb-07
PELVIS REDUNDANT	AC-P18531	ENDEVCO	19-Feb-07

	REAR SID NO.: 013		
	SERIAL NUMBER	MANUFACTURER	CALIBRATION DATE
HEAD AX	AC-P17235	ENDEVCO	29-Jan-07
HEAD AY	AC-P23640	ENDEVCO	29-Jan-07
HEAD AZ	AC-P16863	ENDEVCO	29-Jan-07
UPPER RIB	AC-P32464	ENDEVCO	19-Feb-07
LOWER RIB	AC-P32197	ENDEVCO	19-Feb-07
LOWER SPINE	AC-P32455	ENDEVCO	19-Feb-07
PELVIS	AC-P18524	ENDEVCO	19-Feb-07
UPPER RIB REDUNDANT	AC-P32295	ENDEVCO	19-Feb-07
LOWER RIB REDUNDANT	AC-P32227	ENDEVCO	19-Feb-07
LOWER SPINE REDUNDANT	AC-P32139	ENDEVCO	19-Feb-07
PELVIS REDUNDANT	AC-P18518	ENDEVCO	19-Feb-07

REMARKS: None

TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

VEHICLE AND MDB INSTRUMENTATION

	VEHICLE AND MDB INSTRUMENTS		
	SERIAL NUMBER	MANUFACTURER	CALIBRATION DATE
RIGHT FRONT SILL (X)	AC-P18785	ENDEVCO	15-Jan-07
RIGHT FRONT SILL (Y)	AC-P32218	ENDEVCO	15-Jan-07
RIGHT FRONT SILL (Z)	AC-P23926	ENDEVCO	15-Jan-07
RIGHT REAR SILL (X)	AC-P18948	ENDEVCO	15-Jan-07
RIGHT REAR SILL (Y)	AC-P14965	ENDEVCO	15-Jan-07
RIGHT REAR SILL (Z)	AC-P17563	ENDEVCO	15-Jan-07
REAR FLOORPAN ABOVE AXLE (X)	AC-P23993	ENDEVCO	15-Jan-07
REAR FLOORPAN ABOVE AXLE (Y)	AC-P23939	ENDEVCO	15-Jan-07
REAR FLOORPAN ABOVE AXLE (Z)	AC-P23999	ENDEVCO	15-Jan-07
LEFT REAR SILL (Y)	AC-FA2484	ICS	12-Jan-07
LEFT FRONT SILL (Y)	AC-FA2473	ICS	09-Jan-07
LEFT FRONT DOOR CENTERLINE (Y)	AC-P23976	ENDEVCO	16-Jan-07
RIGHT REAR SEAT OCCUPANT COMP. (Y)	AC-P18688	ENDEVCO	19-Feb-07
MID REAR OF LEFT FRONT DOOR (Y)	AC-P35758	ENDEVCO	16-Jan-07
LEFT FRONT DOOR UPPER C/L (Y)	AC-P16662	ENDEVCO	19-Feb-07
MID REAR OF LEFT REAR DOOR (Y)	AC-P23155	ENDEVCO	16-Jan-07
LEFT REAR DOOR UPPER C/L (Y)	AC-P18514	ENDEVCO	19-Feb-07
LOWER LEFT B- PILLAR (Y)	AC-P19197	ENDEVCO	19-Feb-07
MIDDLE LEFT B-PILLAR (Y)	AC-P16625	ENDEVCO	15-Jan-07
LOWER LEFT A-PILLAR (Y)	AC-P17237	ENDEVCO	15-Jan-07
UPPER LEFT A-PILLAR (Y)	AC-J32838	ENDEVCO	15-Jan-07
FRONT SEAT TRACK (Y)	AC-C15007	ENDEVCO	26-Jan-07
REAR SEAT TRACK (Y)	AC-C16416	ENDEVCO	26-Jan-07
VEHICLE CG (X)	AC-C16499	ENDEVCO	26-Jan-07
VEHICLE CG (Y)	AC-C14948	ENDEVCO	26-Jan-07
VEHICLE CG (Z)	AC-C16680	ENDEVCO	26-Jan-07
MDB CG (X)	AC-P18785	ENDEVCO	15-Jan-07
MDB CG (Y)	AC-P32218	ENDEVCO	15-Jan-07
MDB CG (Z)	AC-P23926	ENDEVCO	15-Jan-07
MDB REAR FRAME MEMBER (X)	AC-P18948	ENDEVCO	15-Jan-07
MDB REAR FRAME MEMBER (Y)	AC-P14965	ENDEVCO	15-Jan-07

REMARKS: None